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BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

EDITED BY

CAPT. C. H. B. GRANT.

VOLUME LVI.

SESSION 1935–1936.

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1936.

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PREFACE.

The number of attendances during the past Session was :— 377 members, 39 members of the B. O. U., and 134 guests— a total of 550.

Mr. G. M. Mathews, Chairman of the Club, gave his annual address at the December Meeting, dealing with general matters and a Regional Review from October 1934 to October 1935. He also showed drawings and made some remarks on the Ossification of certain Tendons in the Patagial Fan of Tubinares.

Among the many interesting communications and exhibits given during the Session were—Mr. D. A. Bannerman's new records of birds from West Africa ; Mr. G. L. Bates' note on the occurrence of *Accipiter brevipes* in Arabia ; Mr. P. F. Bunyard's remarks on the nesting of Pied Wagtails in glass-houses ; Mr. G. Harrison's remarks on and exhibition of Cowbirds' eggs ; the Rev. F. C. R. Jourdain's remarks on the Herring and Lesser Black Gulls ; Mr. N. B. Kinnear's exhibition of a drawing of an extinct flightless Duck ; Dr. G. Carmichael Low's description of his tour round the world ; Dr. P. R. Lowe's remarks on an influx of Jays into Hampshire ; Mr. J. D. Macdonald's remarks on and exhibition of the webbed feet of Redshanks ; Dr. P. H. Manson-Bahr's remarks on Birds of Paradise ; Col. R. Meinertzhagen's remarks on the Herring and Lesser Black-backed Gulls ; and Mr. H. Whistler's record of the Subalpine Warbler from Ross-shire.

Films and slides were shown by—Mr. W. B. Alexander, slides of the work at the bird observatory, Isle of May ; Mr. E. C. Stuart Baker, slides of Finland and Lapland ; Major R. S. P. Bates, slides of the bird-life of Kashmir ; the Hon. Anthony Chaplin, a film of a voyage to various parts of the world ; Mr. H. A. Gilbert, slides on the working of a Duck decoy ;

Mr. C. Horton-Smith, a film of some birds in flight; Dr. Kenneth Morris, a film of the nesting of the Hobby and Golden Oriole; Capt. H. M. Salmon, slides of the Manx Shearwater; Mr. I. M. Thomson, slides of various birds; Mr. B. W. Tucker, slides of South Spain; and Mr. G. M. Turner, a film of the birds of Stewart Island, New Zealand.

New forms were described by—Mr. E. C. Stuart Baker, Mr. G. L. Bates, Mr. C. W. Benson, Mr. E. G. Bird, Mr. N. B. Kinnear, Admiral H. Lynes, Mr. G. M. Mathews, Dr. Finn Salomonsen, Messrs. W. L. Sclater and R. E. Moreau, and Mr. C. M. N. White.

The Club entertained as distinguished guests—The Hon. Anthony Chaplin, Mr. and Mrs. C. Horton-Smith, Dr. Kenneth Morris, and Mr. George M. Turner.

CLAUDE H. B. GRANT,
Editor.

London, July 1936.

BRITISH ORNITHOLOGISTS' CLUB.

(Founded October 5, 1892.)

TITLE AND OBJECTS.

The objects of the Club, which shall be called the "British Ornithologists' Club," are the promotion of social intercourse between Members of the British Ornithologists' Union and to facilitate the publication of scientific information connected with ornithology.

RULES.

(*As amended, October* 9, 1935.)

Management.

I. The affairs of the Club shall be managed by a Committee, to consist of a Chairman, who shall be elected for three years, at the end of which period he shall not be eligible for re-election for the next term; a Vice-Chairman, who shall serve for one year, and who shall not be eligible for the next year; an Editor of the 'Bulletin,' who shall be elected for five years, at the end of which period he shall not be eligible for re-election for the next term; a Secretary and a Treasurer, who shall each be elected for a term of one year, but who shall be eligible for re-election. There shall be in addition four other Members, the senior of whom shall retire each year, and another Member be elected in his place; every third year the two senior Members shall retire and two other Members be elected in their place. Officers and Members of the Committee shall be elected by the Members of the Club at a General Meeting, and the names of such Officers and Members of Committee nominated by the Committee for the ensuing year, shall be circulated with the notice convening the General Meeting, at least two weeks before the Meeting. Should any Member wish to propose another candidate, the nomination of such, signed by at least two Members, must reach the Secretary at least one clear week before the Annual General Meeting.

II. Any Member desiring to make a complaint of the manner in which the affairs of the Club are conducted, must communicate in writing with the Chairman, who will, if he deem fit, call a Committee Meeting to deal with the matter.

III. If the conduct of any Member shall be deemed by the Committee to be prejudicial to the interests of the Club, he may be requested by the Committee to withdraw from the Club. In the case of refusal, his name may be removed from the list of Members at a General Meeting, provided that, in the notice calling the Meeting, intimation of the proposed resolution to remove his name shall have been given, and that a majority of the Members voting at such Meeting record their votes for his removal.

A Member whose name has been removed shall forfeit all privileges of Membership and shall have no claim on the Club from the date of his removal.

Subscriptions.

IV. Any Member of the British Ornithologists' Union may become a Member of the Club on payment to the Treasurer of an entrance-fee of one pound and a subscription of one guinea for the current Session. On Membership of the Union ceasing, Membership of the Club also ceases.

Any Member who has not paid his subscription before the last Meeting of the Session, shall cease, *ipso facto*, to be a Member of the Club, but may be reinstated on payment of arrears.

Any Member who has resigned less than five years ago may be reinstated without payment of another Entrance Fee.

Any Member who resigns his Membership on going abroad may be readmitted without payment of a further Entrance Fee at the Committee's discretion.

Meetings.

V. The Club will meet, as a rule, on the second Wednesday in every month, from October to June inclusive, at such hour and place as may be arranged by the Committee, but should such Wednesday happen to be Ash Wednesday, the Meeting will take place on the Wednesday following. At these Meetings papers upon ornithological subjects will be read, specimens exhibited and described, and discussion invited.

VI. A General Meeting of the Club shall be held on the day of the October Meeting of each Session and the Treasurer shall present thereat the Balance-sheet and Report; and the election of Officers and Committee, in so far as their election is required, shall be held at such Meeting.

VII. A Special General Meeting may be called at the instance of the Committee, for any purpose which they deem to be of sufficient importance, or at the instance of not fewer than fifteen Members. Notice of not less than two weeks shall be given of every General and Special General Meeting.

Introduction of Visitors.

VIII. Members may introduce visitors at any ordinary Meeting of the Club, but the same guest shall not be eligible to attend on more than three occasions during the Session. No former Member, who has been removed for non-payment of subscription, or for any other cause, shall be allowed to attend as a guest.

'Bulletin' of the Club.

IX. An Abstract of the Proceedings of the Club shall be printed as soon as possible after each Meeting, under the title of the 'Bulletin of the British Ornithologists' Club' and shall be distributed gratis to every Member who has paid his subscription.

Contributors are entitled to six free copies of the 'Bulletin,' but if they desire to exercise this privilege, they must give notice to the Editor when their manuscript is handed in. Members purchasing extra copies of the 'Bulletin' are entitled to a rebate of 25 per cent. on the published price, but not more than two copies can be sold to any Member unless ordered before printing.

Descriptions of new species may be published in the 'Bulletin,' although such were not communicated at the Meeting of the Club. This shall be done at the discretion of the Editor and so long as the publication of the 'Bulletin' is not unduly delayed thereby.

Any person speaking at a Meeting of the Club shall be allowed subsequently—subject to the discretion of the Editor—to amplify his remarks in the 'Bulletin,' but no fresh matter shall be incorporated with such remarks.

X. No communication, the whole or any important part of which has already been published elsewhere, shall be eligible for publication in the 'Bulletin,' except at the discretion of the Editor; and no communication made to the Club may be subsequently published elsewhere without the written sanction of the Editor.

Alteration and Repeal of Rules.

XI. Any suggested alteration or repeal of a standing rule shall be submitted to Members to be voted upon at a General Meeting convened for that purpose.

COMMITTEE, 1935–1936.

G. M. Mathews, *Chairman*. Elected 1935.

H. Whistler, *Vice-Chairman*. Elected 1935.

Capt. C. H. B. Grant, *Editor*. Elected 1935.

Dr. A. Landsborough Thomson, *Hon. Secretary*. Elected 1935.

C. W. Mackworth-Praed, *Hon. Treasurer*. Elected 1935.

A. Ezra. Elected 1933.

Dr. J. M. Harrison. Elected 1933.

Col. A. E. Hamerton. Elected 1934.

J. H. McNeile. Elected 1935.

Officers of the British Ornithologists' Club, Past and Present.

Chairmen.

P. L. Sclater, F.R.S.	1892–1913.
Lord Rothschild, F.R.S.	1913–1918.
W. L. Sclater.	1918–1924.
H. F. Witherby.	1924–1927.
Dr. P. R. Lowe.	1927–1930.
Major S. S. Flower.	1930–1932.
D. A. Bannerman.	1932–1935.
G. M. Mathews.	1935–

Vice-Chairmen.

Lord Rothschild, F.R.S.	1930–1931.
W. L. Sclater.	1931–1932.
H. F. Witherby.	1932–1933.
G. M. Mathews.	1933–1934.
N. B. Kinnear.	1934–1935.
H. Whistler.	1935–1936.

Editors.

R. Bowdler Sharpe.	1892–1904.
W. R. Ogilvie-Grant.	1904–1914.
D. A. Bannerman.	1914–1915.
D. Seth-Smith.	1915–1920.
Dr. P. R. Lowe.	1920–1925.
N. B. Kinnear.	1925–1930.
Dr. G. Carmichael Low.	1930–1935.
Captain C. H. B. Grant.	1935–

Honorary Secretaries and Treasurers.

Howard Saunders.	1892–1899.
W. E. de Winton.	1899–1904.
H. F. Witherby.	1904–1914.
Dr. P. R. Lowe.	1914–1915.
C. G. Talbot-Ponsonby.	1915–1918.
D. A. Bannerman.	1918–1919.
Dr. Philip Gosse.	1919–1920.
J. L. Bonhote.	1920–1922.
C. W. Mackworth-Praed.	1922–1923.
Dr. G. Carmichael Low.	1923–1929.
C. W. Mackworth-Praed.	1929–1935.

Honorary Secretaries.

Dr. A. Landsborough Thomson.	1935–

Honorary Treasurers.

C. W. Mackworth-Praed.	1935–

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TURTLE, LANCELOT J.; 17–21 Castle Place, Belfast.

TYRWHITT-DRAKE, Sir HUGH G., F.Z.S.; Cobtree Manor, Sandling, Maidstone.

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160 Whitaker, Joseph I. S., F.Z.S.; Malfitano, Palermo, Sicily.

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165 Wishart, E. E.; Marsh Farm, Binsted, Arundel, Sussex.

Witherby, Harry F., M.B.E., F.Z.S. (*Chairman*, 1924–1927); Gracious Pond Farm, Chobham, near Woking, Surrey.

Witherington, G.; Sumner Plat, Hayward's Heath.

Wood, Casey A., M.D.; c/o The Library of Ornithology, McGill University, Montreal, Canada.

Workman, William Hughes, F.Z.S.; Lismore, Windsor Avenue, Belfast.

170 Worms, Charles de; Milton Park, Egham, Surrey.

Total number of Members 170

NOTICE.

[Members are specially requested to keep the Hon. Secretary informed of any changes in their addresses, and those residing abroad should give early notification of coming home on leave.]

LIST OF AUTHORS

AND OTHER PERSONS REFERRED TO.

Page

ACCOUNTS, STATEMENT OF 4

ACLAND, Miss C. M.
Exhibition of a Tawny Owl casting 29

ALEXANDER, W. B.
Showed slides illustrating the work of the bird observatory on the Isle of May 97

ANNUAL GENERAL MEETING 2

BAKER, E. C. STUART.
Exhibition of, and remarks on, some slides of Finland and Lapland 6–7

Description of a new subspecies of Owl (*Strix indranee shanensis*) from the Shan States 36–37

BANNERMAN, D. A.
A communication on four new records of birds from West Africa 34–35

Birds from Sierra Leone, recorded for the first time 62

Second record of a Wigeon from Nigeria 62–63

BATES, G. L.
Descriptions of two new subspecies from Arabia, *Ammomanes deserti hijazensis* and *Merops orientalis najdanus*, and a note on *Merops orientalis meccanus* 8–10

Note on the occurrence of *Accipiter brevipes* in Arabia ... 131

Description of a new race of Lark (*Calandrella blanfordi philbyi*) from Arabia 130–131

Page

BATES, Major R. S. P.

Showed slides illustrating the bird-life of the Kishenganga Valley, Kashmir 98

BENSON, C. W.

Description of a new race of Wren-Warbler (*Calamonastes simplex neglectus*) from Nyasaland..... 71–72

Description of a new subspecies, *Alethe macclouniei njombe* 100

Note on the status of the genus *Cryptospiza* 100–101

Note on *Apalis bamendæ bensoni* 101–103

BIRD, C. G.

A note on the Eastern Calandra Lark from southern Asia Minor 35–36

Note on Crested Larks from the Near East 55–58

BIRD, E. G.

Descriptions of two new subspecies from the Outer Hebrides—*Emberiza schœniclus mackenziei* and *Anthus spinoletta meinertzhageni*..... 54–55

BUNYARD, P. F.

Exhibition of, and remarks on, a series of Cuckoo and Reed-Warbler eggs; also a Reed-Warbler's nest 29–33

Exhibition of, and remarks on, a collection of eggs 68–70

Remarks on the roosting of Pied Wagtails (*Motacilla alba lugubris*) in commercial glass-houses 108–109

CHAIRMAN, THE.

During his Annual Address Mr. G. M. MATHEWS exhibited drawings showing Albatrosses, Petrels, and the ossification of certain tendons in the patagial fan of Tubinares. 42–50

CHAPLIN, The Hon. ANTHONY.

Showed a film of a voyage to various parts of the world, and made remarks regarding the birds seen 122

CHASEN, F. N.

Note on *Stachyris nigriceps rileyi*, nom. nov. for *Stachyris nigriceps dilutus* 115

COMMITTEE FOR 1935–1936 3

Page

Ezra, A.

Exhibition of a nest of a Chaffinch 7

Gilbert, H. A.

On behalf of Mr. A. Brook, exhibited some photographs of Curlew and other birds in Radnorshire 8

Exhibition of photographs of Curlew 54

Showed slides illustrating the working of a Duck decoy.. 98

Grant, Capt. C. H. B., and C. W. Mackworth-Praed.

Note on the races of the Herring-Gull which visit Eastern Africa in the non-breeding season 33–34

Note on the type-locality of *Sarothrura lineata* 58–59

Note on the type-localities of *Cursorius cursor somalensis* and *Rhinoptilus africanus hartingi* 72–73

Note on the correct type-locality of *Hemiparra c. crassirostris* 92–93

Sent the following four notes :—

1. On *Numenius arquata suschkini* 103
2. On the names used for the *Rhinoptilus chalcopterus* group of Coursers 103–104
3. On the status of *Streptopelia fulvopectoralis* 104–105
4. On the exact type-locality of *Tympanistria t. tympanistria* 105

Sent the following four notes :—

1. On the type-locality of *Œna capensis* 115–116
2. On the correct type-locality of *Cuculus clamosus*..... 116
3. On the correct type-locality of *Clamator serratus* 116
4. On the correct type-locality of *Clamator hypopinarus*. 116–117

Sent the following two notes :—

1. On *Cuculus clamosus* and *Cuculus jacksoni* 123–124
2. On the status of *Coccystes albonotatus* and *Coccystes caroli*..... 124–126

Sent the following three notes :—

1. On the movements of the Lesser Cuckoo during the non-breeding season 131–133
2. On the exact type-locality of *Corythæola cristata cristata* 133
3. On the original reference and type-locality of *Corythaixoides leucogaster*..... 133–134

Page

Harrison, B. G.

An account of a trip to Uruguay in 1935. 70

Exhibition of, and remarks on, a series of eggs of the Shiny Cowbird (*Molothrus b. bonariensis*) 88–90

Horton-Smith, C.

Showed a film of birds in flight, taken at Handa, Sutherland 98

Iredale, T.

Sent a communication on the name of the British Redshank 5

Jordan, Dr. K.

Exhibition of, and remarks on, eggs of a Bird of Paradise, *Manucodia* (*Eucorax*) *comrii*, from Fergusson Island 115

Jourdain, Rev. F. C. R.

Remarks on Stegmann's review of the Gulls in the Journ. . Ornith. 1934, p. 340 etc. 27–29

Remarks on Mr. Bunyard's communication on Cuckoos' eggs (*antea*, pp. 29–32) 53–54

Remarks on a White-breasted Sea-Eagle (*Cuncuma leucogaster*) obtained in the eastern Solomon Islands 68

Notes on a supposed Oyster-catcher's egg 86–88

A further note on the White-breasted Sea-Eagle from the Solomon Islands 92

Kinnear, N. B.

Exhibition of, and remarks on, birds collected by Mr. T. H. Manning on Southampton Island 19

Exhibition of a drawing of an extinct Flightless Duck ... 19

Description of a new race of Nuthatch, *Sitta castanea tonkinensis*, from Laos, Indo-China 71

Literature, List of (referred to at Annual Address) 44

Low, Dr. G. Carmichael.

A description of his tour round the world, illustrated by a series of pictures 79–86

Page

Lowe, Dr. P. R.

Exhibition of, and remarks on, two hybrids between Pheasants and Black Game 22–24

Remarks on a recent influx of Jays into Hampshire 24–27

A reply to Colonel Meinertzhagen's remarks (pp. 50–51); also remarks on Stegmann's review of the Gulls..... 51–53

Lynes, Rear-Admiral H.

Alterations to the classification of the *Cisticolæ*, with two new races, *Cisticola dambo kasai* and *Cisticola pipiens congo*; also *Cisticola angusticauda* not *Apalis angusticauda*..... 109–115

Macdonald, J. D.

Exhibition of, and remarks on, the size of the webs on the feet of Redshanks 120–121

Mackworth-Praed, C. W. (See under Grant, Capt. C. H. B.)

Manson-Bahr, Dr. P. H.

Exhibition of, and remarks on, some tempera-paintings of Birds of Paradise 63–68

Mathews, G. M.

Description of a new Gadfly-Petrel (*Pterodroma kidderi okahia*) from New Zealand 37–38

Description of a new subspecies of the Kermadec Petrel (*Pterodroma neglecta juana*)..... 59

Note on the change of name of the Buff-sided Fly-Robin. 106

Remarks on Fork-tailed Petrels..... 134

Mavrogordato, J. D.

Exhibition of eggs of the Goshawk (*Accipiter gentilis*) laid in captivity in Great Britain 122

Meeting, Special General 2

Meinertzhagen, Col. R.

Exhibition of, and remarks on, a Nutcracker (*Nucifraga c. caryocatactes*) 50

Remarks on Herring- and Lesser Black-backed Gulls 50–51

Moreau, R. E. (See under Sclater, W. L.)

Page

Morris, Dr. Kenneth.

Showed films of the nesting of the Hobby and Golden Oriole 98

Rule 1 amended 2

Salmon, Capt. H. M.

Showed slides of the Manx Shearwater 97

Salomonsen, Dr. Finn.

Description of a new race of the Willow Grouse (*Lagopus lagopus variegatus*) 99–100

Sclater, W. L.

A correction, showing that *Dioptrornis amani* is identical with *Alseomax cinereus kikuyuensis* 19

—— and R. E. Moreau.

An account of Mr. R. E. Moreau's recent expedition to the central northern highlands of Tanganyika Territory, exhibiting and describing one new species and five new subspecies in their joint names :—*Turdus olivaceus oldeani*, *Zosterops virens mbuluensis*, *Zosterops virens meruensis*, *Yungipicus obsoletus crateri*, *Phyllastrephus orostruthus amani*, and *Anthreptes pallidigaster* 10–19

Seth-Smith, D.

Remarks on the display of the Birds of Paradise 68

Special General Meeting 2

Swynnerton, C. F. M.

Remarks on Cuckoos' eggs in his paper in ' The Ibis ' ... 54

Thomson, Dr. A. Landsborough.

Records on the roosting of *Motacilla a. alba* 109

Thomson, I. M.

Showed slides of various birds 98

Tucker, B. W.

An account, illustrated by lantern-slides, of his trip to South Spain 78

Page

TURNER, G. M.

Showed a film of the Mutton-Bird, and many other birds inhabiting and breeding on Stewart Island. 130

WALLIS, H. M.

Read notes from Miss Ruth Cooper on birds observed in Morocco 76–78

WHISTLER, H.

Exhibition of, and remarks on, a female Subalpine Warbler killed at the Tarbatness Lighthouse, Ross-shire 5

WHITE, C. M. N.

Description of a new subspecies, *Monarcha chrysomela præpta*, from Fergusson Island 38–39

Note on the Australian Tree-Martin (*Petrochelidon nigricans*) 90–92

A note on the names and subspecies of *Petroica phœnicea* and *Petroica rodinogaster* 126–127

WITHERBY, H. F.

Remarks on the question of bombing on the Northumberland coast 78

Remarks on Mr. G. L. Bates's notes on the races of the Grey Wagtail (*Motacilla cinerea*) 98–99

Remarks on the roosting of Pied Wagtails (*Motacilla alba lugubris*) 109

Remarks on the size of the webs on the feet of Redshanks. 122

8 NOV 1935
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

BRITISH MUSEUM
Z
NATURAL HISTORY

No. CCCLXXXIX.

The three-hundred-and-eighty-fourth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, October 9, 1935.

Chairman : Mr. H. Whistler.

Members present :—Miss C. M. Acland ; W. B. Alexander ; E. C. Stuart Baker ; D. A. Bannerman ; Miss P. Barclay-Smith ; Mrs. R. G. Barnes ; F. J. F. Barrington ; Miss M. G. S. Best ; Brig.-Gen. R. M. Betham ; A. W. Boyd ; G. Brown ; P. F. Bunyard ; Mrs. E. S. Charles ; Hon. G. L. Charteris ; H. P. O. Cleave ; Maj.-Gen. Sir P. Z. Cox ; A. Ezra ; Miss J. M. Ferrier ; H. A. Gilbert ; Capt. C. H. B. Grant (*Editor*) ; Rev. J. R. Hale ; Col. A. E. Hamerton ; R. E. Heath ; P. A. D. Hollom ; Dr. E. Hopkinson ; Major H. P. W. Hutson ; Rev. F. C. R. Jourdain ; Dr. N. H. Joy ; N. B. Kinnear ; Miss E. P. Leach ; Miss C. Longfield ; Dr. P. R. Lowe ; Dr. N. S. Lucas ; C. W. Mackworth-Praed (*Hon. Treas.*) ; J. H. McNeile ; Lt.-Col. H. A. F. Magrath ; Dr. P. H. Manson-Bahr ; T. H. Newman ; C. Oldham ; B. B. Osmaston ; Mrs. O. Peall ; H. J. R. Pease ; H. L. Popham ; Miss G. Rhodes ; Dr. B. B. Rivière ; W. L. Sclater ; D. Seth-Smith ; Dr. A. Landsborough Thomson

(*Hon. Sec.*); Dr. C. B. Ticehurst; B. W. Tucker; H. M. Wallis; Mrs. H. W. Boyd Watt; J. S. Wing; H. F. Witherby; C. G. M. de Worms.

Members of the B. O. U.:—Rev. F. L. Blathwayt; Mrs. M. D. Brindley; Miss B. A. Carter; Dr. A. H. Evans; Lieut.-Commdr. A. Hughes; Mrs. H. M. Rait Kerr; Mrs. M. L. Lemon; Col. W. A. Payn; Sir M. C. Seton.

Guests:—Col. T. P. Aldworth; Mrs. Stuart Baker; C. W. Benson; Mrs. Betham; Mrs. Gilbert; J. P. R. Hale; I. L. Hawkins; Miss L. Lodge; Mrs. Mackworth-Praed; R. C. Milward; A. C. Norris; Mrs. Sclater; F. G. Swayne; A. L. W. Turner; Mrs. Witherby.

Special General Meeting.

A Special General Meeting was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, at 6.15 p.m. Mr. David Bannerman took the Chair, and thirty-one other members of the Club were present.

The Committee proposed that the offices of Honorary Secretary and Treasurer should be separated, and that the pertinent paragraph of Rule 1 should accordingly be amended to read :—

> "A Secretary and a Treasurer, who shall each be elected for a term of one year, but who shall be eligible for re-election."

The motion was passed unanimously.

Annual General Meeting.

This followed immediately, at 6.20 p.m., under the same chairmanship and with the same attendance. The minutes of the last Annual General Meeting were read and confirmed.

Mr. C. W. Mackworth-Praed then read his Treasurer's Report. He said that the financial statement showed nothing of special note, except that 500 National Saving Certificates had been purchased with money previously held on deposit.

Mr. Mackworth-Praed then went on to make his Secretarial Report. He said that the number of members remained the

same. He regretted to announce the deaths of Sir John Rose Bradford, Dr. W. J. Adie, Mr. J. D. La Touche, and Mr. F. W. Styan. Two members had resigned—Mr. R. F. Hope and Mr. C. B. Kloss. Four new members had joined the Club.

Attendances at meetings were a record by a considerable margin, being 605, as against the previous best of 539 last year. It was mentioned that it might become necessary to limit the number of guests at the March dinner.

Both reports were unanimously approved.

Mr. G. M. Mathews was elected Chairman in place of Mr. D. A. Bannerman, whose period of office terminated.

Mr. H. Whistler was elected Vice-Chairman in place of Mr. N. B. Kinnear, whose period of office terminated.

Captain Claude H. B. Grant was elected Editor of the 'Bulletin' in place of Dr. G. Carmichael Low, whose period of office terminated. A vote of thanks to the retiring Editor was carried by acclamation.

Dr. A. Landsborough Thomson was elected Hon. Secretary in place of Mr. C. W. Mackworth-Praed, who vacated that office. A vote of thanks to the retiring Secretary was carried unanimously.

Mr. C. W. Mackworth-Praed was re-elected as Hon. Treasurer.

Mr. J. H. McNeile was elected a member of the Committee in place of Mr. H. Whistler.

Committee, 1935–1936.

Mr. G. M. Mathews, *Chairman* (elected 1935).
Mr. H. Whistler, *Vice-Chairman* (elected 1935).
Capt. Claude H. B. Grant, *Editor* (elected 1935).
Dr. A. Landsborough Thomson, *Hon. Secretary* (elected 1935).
Mr. C. W. Mackworth-Praed, *Hon. Treasurer* (elected 1929).
Mr. A. Ezra (elected 1933).
Dr. J. M. Harrison (elected 1933).
Col. A. E. Hamerton (elected 1934).
Mr. J. H. McNeile (elected 1935).

BRITISH ORNITHOLOGISTS' CLUB.

Financial Statement for the 12 *months September* 1, 1934, *to August* 31, 1935.

12 m'ths ended Aug. 31, 1934.									12 m'ths ended Aug. 31, 1934.								
£	s.	d.		£	s.	d.	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
			To Balance in Hand, September 1, 1934:—										By Printing and Distribution of						
31	5	1	Cash at Bank, Current a/c	28	8	0				152	11	5	Publications and 'Bulletin'				149	3	5
653	5	9	Do. Deposit a/c	650	0	0				11	6	0	,, Hire of Lanterns at Meetings				14	17	0
1	10	9½	In Hands of Treasurer ...		6	6							,, H. B. Usher for compiling and arranging Index to						
							678	14	6	5	8	4	'Bulletin' B. O. C., 1934–35.				5	5	10
			,, Entrance Fees of 4 New										,, Miscellaneous Expenditure, including Audit Fee, Print-						
13	0	0	Subscribers	4	0	0				18	10	9½	ing, Stationery, and Postages.				22	4	8
193	4	0	,, Subscriptions—172 Members	180	11	0							,, Donation to VIII. International Ornithological Con-						
			,, Subscriptions received in							100	0	0	gress.....				–	–	–
3	3	0	advance.....	1	1	0							,, British Trust for Ornithology:						
							185	12	0	–	–	–	Donation.....				15	0	0
27	13	8	,, Sales of 'Bulletin'.....				33	11	11				,, Zoological Society of London:						
			,, Balance of Funds of Migration Sub-Committee of the										Donation to 'Zoological Record' Fund.....				10	10	0
40	3	5	B. O. C.				–	–	–	–	–	–	,, Balance in Hand, August 31, 1935:—						
3	5	4	,, Bank Interest				1	18	2	28	8	0	Cash at Bank, Current a/c	30	14	2			
										650	0	0	Do. Deposit a/c	251	18	2			
													500 National Savings Certificates at cost, held by						
										–	–	–	Bank	400	0	0			
											6	6	In Hands of Treasurer ...		3	4			
																	682	15	8
£966	11	0½					£899	16	7	£966	11	0½					£899	16	7

C. W. MACKWORTH-PRAED, *Treasurer.*

We have compared the foregoing Statement with the Books and Vouchers of the British Ornithologists' Club for the year ended August 31, 1935, and certify it to be in accordance therewith. We have also verified the Cash at Bank and the holding of National Savings Certificates.

23 Queen Victoria Street,
London, E.C. 4.
September 3, 1935.

W. B. KEEN & CO.,
Chartered Accountants.

Mr. Hugh Whistler exhibited a female Subalpine Warbler which was killed with other birds (Meadow-Pipits and a Skylark) at the Tarbatness Lighthouse, Ross-shire, on May 3, 1935. The bird has a wing-length of 58·5 mm. and belongs to the typical race. This is the fifth record for the British Isles, the previous ones being St. Kilda, June 14, 1894, Fair Island, May 6, 1908, Hook Tower Light, Wexford, Sept. 17, 1933, and Isle of May, May 30, 1924. The specimen has been presented to the British Museum.

Mr. Tom Iredale sent the following communication on the name of the British Redshank :—

I have just noted that Dr. C. B. Ticehurst has recommended the acceptance of the distinction of the British Redshank, and has suggested that the correct name to be used is

Tringa totanus bewickii Rennie,

referring to *Totanus bewickii* Rennie (Ornith. Dict. (Montagu, 2nd ed. p. 412, 1831 : Lincolnshire, England) as the earliest name.

As Ticehurst's note was published in the Bull. B. O. C. vol. liii. Oct. 31, 1932, pp. 17–18, it may be that someone has detected the error in his reference. If not, for the sake of accuracy it may be noted that Rennie referred the name *bewickii* to Montagu. Sherborn, in the inestimable ' Index Animalium,' gave " *bewickii, Tringa.* Atkinson, Comp. Brit. Orn. 1920, 156," and upon checking that again Montagu was given as the authority for *bewickii.*

In his Supplement to the ' Ornithological Dictionary ' Montagu described the " Sandpiper, Red-Legged," and observed it did not agree, but did not give it a distinct name at that place. However, thinking it over, in the Catalogue published at the end of the volume he introduced the name *Tringa bewickii,* so that if Ticehurst's separation be accepted the initial reference to the name must read :

> *Tringa bewickii* Montagu, Suppl. Ornith. Dict., Catal. at end of volume, for Red-legged Sandpiper of Bewick: Lincolnshire, England.

[See ' British Birds,' vol. xxix, no. 5, 1935, p. 152 :—*Tringa totanus britannica* Mathews, new name for British Redshank.—Editor.]

Mr. E. C. Stuart Baker exhibited some slides of Finland and Lapland showing various phases of bird-life from south to north.

Commencing at Helsingfors, he showed the town, the harbour, and the numerous islands in the vicinity, some of these latter forming the principal breeding places of many Turnstones. On one such island visited there were no less than five pairs of Turnstone breeding on June 5, 1934, all of which, with one exception, had newly hatched young. On the same island were many nests of Red-breasted Merganser, Velvet Scoter, Eider-duck, Ringed Plover, and an Oyster-catcher. Here and there on these islands there were also many colonies of both Arctic and Common Tern, Lesser Black-backed Gull, Common Gulls, and an occasional Greater Black-backed Gull. Apparently, however, in no case were the two forms of Tern breeding together on the same small island, or, if a large island, on the same part of it.

In the forests round about Helsingfors there were a fair number of Passerine birds breeding, while on the islands many of the houses of the residents had an extraordinary collection of birds breeding in boxes.

Dr. Wasenius, one of the leading ornithologists in Finland, had no less than forty species of birds breeding in and around his house. Some of the most remarkable of these were, perhaps, the following :—Two pairs of Swifts which had made their nests in empty sardine tins under the eaves of the house, while a Tawny Owl inhabited one of the larger nesting-boxes within a very few yards of the house. In addition to these there were Swallows, Martins, Redstarts, Wagtails, three kinds of Titmice, both the Flycatchers, Fieldfares, Chaffinches, and many other of the more common species.

Quite close to Helsingfors there is a little reserve called Vik; here many Ducks and a large colony of Black-headed Gulls breed, among the latter being an occasional pair or two of Little Gull.

In central Finland he was particularly struck by the extraordinary numbers of Raptores; the most common of these was, of course, Zimmerman's Buzzard, of which one might sometimes see half a dozen nests in a day. Others

were the Golden Eagle, Osprey, Honey Buzzard, Peregrine Falcon, innumerable Sparrow-Hawks, Kestrels, Merlins, and an occasional Hobby. The Hen Harrier was common and Montagu's by no means rare.

Of the Passerine birds the little Rustic Bunting was, of course, the most interesting, but, though the bird was far from uncommon, the nests were extraordinarily hard to find, as the birds breed in the depths of swampy forests and sit so close on their nests that they literally have to be pushed off.

Cranes were also met with, and in two instances seen and photographed with their nests.

Of especial interest were the Green Sandpipers, and of these he and Dr. Hortling saw no less than ten nests. In most cases the eggs were deposited in the nest of a *Turdus* of some kind, such as the Fieldfare or Redwing, but other eggs were found in squirrel's dreys, and two clutches in nests of Jays.

From central Finland Mr. Stuart Baker took his hearers north to the Liminka Marshes, where he showed nests and interesting breeding sites of Reeves and other birds; from Liminka to the island of Karlo, the home of Temminck's Stint, Wood Sandpipers, Grey Lag Geese, and many other interesting Ducks; and from Karlo still farther north to the railhead at Rovaniemi, and thence by motor-bus along the wonderful great road to the far north of the little gulf of Liinahamari, the place where the British Fleet was kept during the war, and which never freezes over even in the severest winters. From the end of this road fishing smacks or, in the season, the tourist steamer take visitors to the Fisher Peninsula, where one is in the land of the Red-throated Pipit, Snow- and Lap-Buntings, and the rare forms of *Linota*.

The speaker also described the wonderful nuptial choruses and displays given by the Red-throated Divers, and explained how on one occasion he and his friend were wakened at midnight by hearing the extraordinarily loud chorus made by upwards of thirty pairs of these birds on a little lake quite close to the watcher's house in which they were staying.

Mr. A. Ezra exhibited the nest of a Chaffinch in which had been incorporated coloured confetti, giving to the outside of the nest a remarkably decorative effect.

Other members also mentioned nests of birds made from wire and various other materials.

Mr. H. A. Gilbert exhibited, on behalf of his friend Mr. Arthur Brook, some enlargements of photographs of Curlew and other birds in Radnorshire.

Mr. G. L. Bates sent the following descriptions of two new subspecies from Arabia :—

Ammomanes deserti hijazensis, subsp. nov.

Description.—Differs from *A. d. samharensis* of the Red Sea Province of Sudan (with which four specimens in the British Museum from Sana, in Yemen, and one from Tabuk agree) in having only a fringe of rufous colour on the outer webs of some of the remiges and rectrices, where in *samharensis* there is more rufous. General colour of the back in fresh plumage varying in shade but usually a little darker and more slaty than in *samharensis*. Size often larger, and bill often both longer and stouter.

Distribution.—The rocky hills of the Hijaz from Mecca to Madina and north-eastward to Wadi Rima, and also eastward to Qa'iya. Two specimens from Duwadami, only a little east of Qa'iya, agree better with *samharensis* ; and so, in Arabia, do the Sana specimens mentioned above and one collected by Carruthers at the north end of the Hijaz, at Tabuk.

Type.—Collected by H. St. J. B. Philby (no. 339), Hadda, 14. ix. 34. Brit. Mus. Reg. no. 1934.8.10.3.

Measurements.—Wing in seven sexed males 103–108 mm., in five sexed females 96–100 mm. Many additional specimens of which the sex can only be inferred from the size agree with these. (Eleven males of *samharensis* measure 99–104 mm.)

Remarks.—A large series was obtained at all times of the year. In late winter and spring the colour is greatly altered by wear. Autumn specimens in new plumage were used for comparison.

Merops orientalis najdanus, subsp. nov.

Description.—General colour of a lighter green than *M. o. cyanophrys* (of which I now wish provisionally to regard *meccanus* as a synonym), nearly matching that of *M. o. bilud-schicus* of Persia, though in other characters it is most like *cyanophrys*. Throat of a paler blue than in *cyanophrys*; black throat-band usually narrower, rest of the underparts paler, with less bluish wash.

Distribution.—From Wadi Rima to Riyadh and Kharj, and doubtless also adjoining parts of central Arabia.

Type.—Collected by H. St. J. B. Philby (no. 541), Riyadh, 5. xi. 34. Brit. Mus. Reg. no. 1934.8.10.4.

Measurements (of fifteen specimens).—Wing 92–97 mm.; tail to tip of the next to the longest rectrices 73–80 mm., and the longest (middle) rectrices exceeding this by 14–27 mm. Thus the middle rectrices are but little elongated (as in *cyanophrys*).

Mr. Bates also sent the following note on *Merops orientalis meccanus* Bates, Bull. B. O. C. lv. 1934, p. 21 :—

The form of the Little Bee-eater found in the Mecca district is perhaps not as clearly distinct from that found in Yemen and near Aden (with which Muscat birds also seem to agree) as at first appeared; later specimens from the same Mecca district and from Madina hardly bear out the distinctions. If this uncertainty were the only objection to using the name *meccanus* it might be allowed to stand at present, waiting for further knowledge; but there is another. The type-locality of Cabanis's *cyanophrys* (given in the original description as "Arabia") seems not to be in extreme south-western Arabia, as I at first assumed, but Kunfuda on the coast of Asir, thus nearer to the Mecca than to the Aden district. Heuglin, in 'Ornithologie Nordost Afrika's' (p. 204), says: "This beautiful Bee-eater was discovered by Hemprich and Ehrenberg in the mountains of Qonfudah in Arabia." Moreover, though I do not know where the type-specimens are, I am informed by Dr. Stresemann that they must originally have been of the same lot as the four now at Berlin, all collected

at "Gumfudda" by Hemprich and Ehrenberg. Thus it is probable that the little Bee-eaters recently collected by Mr. Philby in the mountain valleys of the Mecca district represent typical *cyanophrys*, and if those of the southern part of Arabia are really distinct they should be called *muscatensis* Sharpe.

Mr. W. L. Sclater gave an account of Mr. R. E. Moreau's recent expedition to the central northern highlands of Tanganyika Territory, and exhibited and described one new species and five new subspecies in their joint names :—

"Recently (6th Ann. Rep. East Afr. Agric. Res. Sta.)," writes Mr. Moreau, "I drew attention to the fact that the forested mountains along the Rift Valley of northern Tanganyika Territory were virgin ground ornithologically. Their size, up to over 11,000 feet, made them intrinsically the most promising area left unworked in East Africa, and also their situation is such that ignorance of their fauna made a serious gap in our knowledge of the distribution of montane birds. The forests in question form a scattered group separated by about 100 miles of comparatively low dry steppe from those of Kilimanjaro and Meru, by quite 300 miles from the Kivu forests on the west, and by 200 miles from the highlands of south-west Tanganyika Territory recently worked by Loveridge and by Lynes. On the north a connection above 5000 feet exists with the Kenya Highlands, over grassland with forest patches at long intervals.

"In all about 500 birds were collected in the Mbulu District. They contain no startling novelties, though there are certain new races which Mr. Sclater is describing in our joint names. I hope to be able to describe the collection with Mr. Sclater's assistance, and to give some ecological account of the area in the pages of 'The Ibis.' The whole question of the distribution of montane forms in Tanganyika Territory also merits further comprehensive treatment in the light of the local contributions of recent years.

"We travelled from Arusha to Oldeani on December 28, over the immense open spaces of the Masai steppe, recently refreshed to a beautiful green after a long drought. Under

these conditions it is reminiscent of Salisbury Plain (likewise a country of Larks and Plovers), on a vaster scale, and diversified by the volcanic masses of Burka, Essimingor, and Lol-Kissale. The country in general tilts gently westwards, fetching up abruptly at the western wall of the Rift, with Lake Manyara, mostly a glittering salt incrustation, at its base. Northward and southward the precipitous line of the Wall extends to the limits of the view, with the Loolmalassin–Oldeani chain of volcanoes piled on the top. When we returned a month later conditions had already changed. The great steppe was burnt and brown, the north-east monsoon was blowing with full violence, and clouds of dust were being whirled across the country, especially from the basins of the dried-up lakes.

"We stayed ten days on Major Braunschweig's coffee plantation at 5500 feet, right on the lower edge of the Oldeani forest. The transition in soil, climate, vegetation, and birds within the space of 1500 feet and less than 3 miles is there remarkably abrupt. From the short-grass savannah at 4000 feet one passes up through the belt of coffee plantations to a fine rain-forest or, perhaps more correctly, cloud-forest. The last couple of thousand feet of Oldeani Mountain, *i. e.*, above 8000 feet, is covered with a pure stand of bamboo, which has given the mountain its name (in Masai).

"The lower part of the forest was inhabited by several members of the familiar East African highland community, with three remarkable additions, the Green-headed Sunbird, *Cyanomitra verticalis viridisplendens*, the exquisite little Blue Flycatcher, *Erannornis albicauda kivuensis* (known only from much farther west), and an *Apalis*. This, the common Long-tailed Warbler of the tree-tops, turned out to be *Apalis alticola*, a species from the neighbourhood of Lake Nyasa.

"In the main forest the deep slow bark of *Turacus schalowi* was the commonest sound. *Apalis thoracica griseiceps*, *Arizelocichla n. nigriceps*, and other birds were found breeding. The local Olive Thrush turned out to be new, an abnormally dull-coloured race. The White-eyes are puzzling; they seem to be near *Zosterops virens kikuyuensis*, and certainly are very different from the race on Kilimanjaro and Meru. Three of the

common birds struck me as anomalous in those surroundings —the Broad-billed Roller (*Eurystomus afer*), the Spectacled Weaver (*Ploceus ocularis*), and a Crested Flycatcher (the coastal, not the highland form of *Trochocercus bivittatus*). I should have expected *T. albonotatus*.

"On January 8 we moved from Major Braunschweig's plantation and camped at 7500 feet on the north side of the mountain, and on the lip of the great Ngorongoro Crater. It was a glorious place and an exciting one, bitterly cold at night and bracing by day, with wide expanses of short turf and immense views across the crater to piled-up volcanoes with grand names like Olossirua and Ololmoti. In patches of rank grass the big Whydah (*Drepanoplectes jacksoni*) was still in mixed flocks, but preparing to breed. This is a long way south of its recorded range in central Kenya. In the ragged remains of forests we got the first of the new dark Woodpecker, a race of *Yungipicus obsoletus*, alongside such familiar birds as Guinea Pigeons, *Cinnyris m. mediocris* in swarms, and, to our surprise, Black-shouldered Kites (*Elanus cæruleus*). Mixed with bracken on some of the open slopes great masses of a lemon-yellow *Crotolaria* were in flower and full of Golden Sun-birds (*Drepanorhynchus reichenowi*). Stonechats, Streaky Serins (*Poliospiza striolata*), *Ploceus reichenowi*, and *Cisticola hunteri prinioides* were the chief inhabitants of the rank herbage. The interior of the Ngorongoro caldera held little in the way of birds, but on the precipitous slopes we got *Œnanthe schalowi*, in quite a new locality for it.

"The road to Mbulu runs through dry savannah and over terribly eroded hill-sides, where Palæarctic migrants, the Yellow Wagtails, Rollers, Kestrels, Swallows, Wheatears, and White Storks seemed greatly to outnumber the native species. At Mbulu, which is cursed with a raving dust-laden wind nine months in the year, we divided our brief time between the Nou Forest and Tlawi Lake. The forest fauna proved to be similar to that at Oldeani; but we made two unexpected discoveries—White-headed Bank-Martins (*Psalidoprocne albiceps*) and a form of *Bessonornis grotei*, a species hitherto known only from the Ulugurus and the Porotos, and not represented in the Museum. It was attending driver ants

along with Bush Robins (*Pogonocichla stellata*). In this forest, as on Oldeani, the omissions were unexpected—no large Woodpecker, no Barbet of any kind, no Parrot, and no Drongo. Moreover, it seems certain that *Colobus* monkeys are absent.

"On our return journey to Amani, after a couple of days by Bassoda Lake at the foot of Ufiome, we paid a brief visit to Mt. Meru in order to verify that the differences we had observed in the Mbulu group of forests, and particularly the omissions that had struck us there, were not due merely to our lack of observation. After a few hours' work we had found the *Colobus*, the Barbets, the Woodpeckers, and the other birds we had failed to observe on the other mountains; and we conclude, therefore, that their faunal peculiarities are indeed as marked as they appeared."

Turdus olivaceus oldeani, subsp. nov., Scl. & Moreau.

Description.—General colour above dark ashy black without any trace of the greenish tinge which can be always seen in the other races—*elgonensis*, *deckeni*, *roehli*, *uluguru*, and *nyikæ*; below, a paler ashy throughout from the chin to the under tail-coverts, with a faint brownish-sepia wash on the flanks only; no chestnut as in *deckeni*, *elgonensis*, and *uluguru*; throat with fairly well-marked dusky shaft-stripes. Under wing-coverts chestnut as in the other races, but this colour not extending on to the lining of the quills. Bill orange; feet yellow-brown.

Type, no. 2593, an adult male obtained by Mr. Moreau's collector in Oldeani Forest, Mbulu district, Tanganyika Territory, at 6500 feet, on Sept 6, 1934. Brit. Mus. Reg. no. 1935.10.11.1.

Measurements of type.—Total length (of skin) 240 mm.; wing 115; tail 95; culmen 12; tarsus 29.

Remarks.—Six examples were obtained, two males and one female from Oldeani, one from Ngorongoro Crater, and two from Nou Forest, near Mbuli, all localities in the Mbulu district of Tanganyika, between 3° and 4° S. lat. and 35° and 36° E. long.

Zosterops virens mbuluensis, subsp. nov., Scl. & Moreau.

Description.—Resembling *Z. v. kikuyuensis* in most respects,

but the front half of the crown not yellow, well defined from the posterior half, but slightly and gradually more tinged with orange wash over the green. It has the wide and very conspicuous band of white feathers round the eye, but the yellow of the underparts is distinctly duller. From *Z. v. eurycricotus* it differs in the orange-yellow, not sepia-brown, wash on the forehead, but the yellow of the underparts is of a similar tinge. *Z. v. usambaræ* has not got the heavy white eye-band and has the head the same colour as the back. It is also a small bird with a shorter tail.

Type, no. 2664, an adult male obtained by Mr. Moreau's collector in Oldeani Forest, at about 6900 feet, on Sept. 6, 1934. Brit. Mus. Reg. no. 1935.10.11.2.

Measurements.—Wing 65 mm.; tail 52; culmen 10; tarsus 20. The wings of the other males varied from 60–65 mm., and the females from 60–64 mm.

Remarks.—Mr. Moreau has sent a good series of this White-eye from the Mbulu district. Four (2 ♂♂, 2 ♀♀) from Oldeani, six (4 ♂♂, 2 ♀♀) from Nou, and three (2 ♂♂, 1 ♀) from Ubiome; the last three are slightly more yellow on the front half of the crown, showing an approach to *Z. v. kikuyuensis*. These, taken in January, are marked " breeding," while the others, taken in August and September, have the sexual organs " not enlarged " or " slightly enlarged."

This race appears to range as far east as the Paré Mts., but is not found on Kilimanjaro and Meru, which more or less intervene between. How this anomalous state of things can be explained must for the present be left unsolved. Perhaps Mr. Moreau will be able to throw some light on the matter later on.

Zosterops virens meruensis, subsp. nov., Scl. & Moreau.

Description.—Resembling *Z. v. eurycricotus* from Kilimanjaro, with the broad white eye-ring, but much duller and more leaden in tone both above and below; the front of the crown neither bright yellow as in *Z. v. kikuyuensis* nor sienna-brown as in *Z. v. eurycricotus*, but practically the same colour as the rest of the upper parts; the underparts are dull green with a greyish wash, and show no trace of the bright yellow characteristic of the other races. Bill and feet black.

Type, no. 3086, obtained at Nguru Narok Forest, Mt. Meru, at 6000 feet, on Jan. 26, 1935, by Mr. R. E. Moreau. Brit. Mus. Reg. no. 1935.10.11.6.

Measurements.—Wing 60 mm.; tail 50; tarsus 20; culmen 11. The female also has a wing of 60 mm.

Remarks.—In addition to the type a female was obtained on the previous day; in both cases the birds were breeding.

The White-eyes of Kenya and northern Tanganyika are very puzzling; there is much variation within a fairly restricted area and the variations appear to be fairly constant. Of the group with a broad white eye-ring we have the following :—

(1) *Z. v. kikuyuensis*: with a conspicuous and distinct yellow frontal patch; bright yellow on throat and along the central line of the breast and abdomen.

Distribution.—Central highlands of Kenya.

(2) *Z. v. mbuluensis*: very similar, but without the distinct frontal patch, the forehead being merely somewhat brighter than the crown, but the underparts bright yellow. This bird replaces *Z. v. kikuyuensis* to the south in the Mbulu district and also in the Paré Mts. to the east, whence Mr. Moreau has sent a good series of six skins, all practically indistinguishable from the Mbulu bird.

(3) *Z. v. eurycricotus*: rather duller, without bright yellow on the forehead or underparts, but with the forehead becoming a sienna-brown.

This race appears to be confined to Kilimanjaro.

(4) *Z. v. meruensis*: still duller and more greyish (see above). Confined to Mt. Meru.

In addition we have *Z. v. jacksoni* in the western highlands of Kenya and *Z. v. usambaræ* in the Usambara Mts., but these are smaller and have not the characteristic broad white eye-ring.

Yungipicus obsoletus crateri, subsp. nov., Scl. & Moreau.

Description.—Resembling *Y. o. ingens* of the highlands of central Kenya, but much darker; the back very dark sepia and the wings quite black; the white superciliary line running

from the bill to a conspicuous spot above the ear-coverts in *Y. o. ingens* is in the present race nearly obsolete, and has quite disappeared in front of the eye; undersurface far more dusky than in *Y. o. ingens*, the dusky striping on the abdomen far heavier, and a dusky patch on either side of the breast; the throat also spotted with dusky. Bill black, legs grey-black.

Type, no. 2975, an adult male collected by R. E. Moreau in vestigial forest on the south-west lip of the crater of Ngorongoro Volcano, in the Mbulu district of Tanganyika Territory, at 7500 feet, on Jan. 9, 1935. Brit. Mus. Reg. no. 1935.10.11.3.

Measurements of type.—Wing 88 mm.; tail 45; culmen 20; tarsus 15.

Remarks.—Another bird collected at the same place and date is sexed a female but has the characteristic red nape-patch of the male. The third example from the Nou Forest, obtained six days later, is undoubtedly a female without the red on the nape.

This is quite a distinct race and extends the range of the species farther south. The five previously described races range from Senegal to Eritrea and south to central Kenya Colony.

Phyllastrephus orostruthus amani, subsp. nov., Scl. & Moreau.

Description.—Resembling *P. o. orostruthus* recently described by Mr. J. Vincent (Bull. B. O. C. liii. 1933, p. 133) from Namuli Mt., Portuguese East Africa, but the back and wings a more olive and less brownish shade of green, the crown the same but slightly darker, not sepia as in the typical race. The rump and tail only very slightly more brown than the back, not the contrasting cinnamon-brown as noted by Vincent; below the yellow is brighter and more distinct, and olive-green dappling more definite and distinct. In dimensions the wing is slightly longer and the bill and tarsus shorter than in the typical race. Iris russet, bill black, feet pale grey, with pinkish undertone.

Type, no. 3281, an adult male obtained by Mr. R. E. Moreau's collector in Amani Forest, at 3000 feet, on Aug. 2, 1935. Brit. Mus. Reg. no. 1935.10.11.4. Only the type obtained.

Measurements of type.—Total length (of skin) 178 mm.; wing 87 (against 82 in the typical race); tail 70; culmen from base of skull 16 (against 21); tarsus 22 (against 27).

Remarks.—It is very remarkable that after so many years collecting Mr. Moreau should have obtained an example of this very distinct species of Green Bulbul, hitherto only known from the single type obtained by Mr. Vincent about a thousand miles farther south in Portuguese East Africa. The new race is an excellent one and at once distinguishable, and although both the Amani and Namuli forms are based on a single example there can be no doubt of their distinctness.

Mr. Moreau writes: "I think the Bulbul must be very rare here; many Green Bulbuls have been collected in the area from which the new one came, and if it had been at all common it must have been taken previously. The account my native collector gave of its song tallies well with what Mr. Vincent gathered about the Namuli bird, also from his African collector."

Anthreptes pallidigaster, sp. nov., Scl. & Moreau.

Description.—Upper parts and wings sooty-brown; the head, mantle, least wing-coverts, throat, and upper breast with a steel-green gloss with violet reflections, strongest on the throat; rest of underparts greyish-white, the bases of the individual feathers sooty; tail deep blue; pectoral tufts scarlet-vermilion; under wing-coverts silky white; a pale border to the inner webs of remiges. Bill, legs, and feet black.

Type.—Male, apparently adult, Amani, no. 3309, obtained by Mr. Moreau's collector in lowland evergreen forest in the Sigi Valley, about 4 miles east of Amani, altitude 1700 feet, on Aug. 9, 1935. Brit. Mus. Reg. no. 1935.10.11.5.

Measurements.—Wing 53 mm.; culmen 12; tail 32; tarsus 13.

Remarks.—That acute collector Salimu Asmani, who recognized this Sunbird as new, obtained two other birds at the same time out of a party of six. The female has fully as much gloss as the type male, with a particularly rich violet gloss on the throat, but the scarlet pectoral tufts are reduced to the merest vestiges and the measurements are appreciably

smaller: wing 49 mm., culmen 11·5, tail 32. The second male agrees exactly with the type except that it has slightly less gloss.

This little Sunbird is a very remarkable discovery. It is quite unlike any other species hitherto described. It has the bill of *Anthreptes*, short and hardly curved at all, the lower line of the lower mandible being nearly straight. The general coloration reminds one of *Cinnyris albiventris*, but it has a very much shorter bill and is altogether a very different bird structurally.

Other interesting birds in the Mbulu collection of Mr. R. E. Moreau are:

(1) Apalis thoracica griseiceps.

Seven examples. These appear to be identical with topotypes of this race from Kilimanjaro, while the Usambara birds appear to have darker crowns and less green on the back; but the material available from these last two localities is not sufficient to settle this point and as to whether the Usambara birds deserve racial distinction.

(2) Apalis alticola.

A good series of eight examples. Previously the British Museum had only the type from Nyasaland and an example from Kambove. These skins are, therefore, welcome additions to the British Museum collection.

(3) Bessonornis grotei.

Two skins of this handsome Robin-Chat from the Nou Forest are new to the British Museum collection. The bird was described in 1895 by Reichenow under the name of *Callene albigularis* from the Uluguru Hills. As the name had been previously used Dr. Reichenow changed it (Verh. Orn. Ges. Bay. xix. 1932, p. 584) to *Bessonornis grotei*. When an opportunity occurs Mr. Moreau's skins should be compared with the type in the Berlin Museum.

(4) Campephaga quiscalina münzneri.

A pair of these fine Cuckoo-Shrikes from Oldeani Forest, at 6500 feet, are a useful addition to the collection of the Natural History Museum. The race was represented previously by only a pair of males from Uluguru Mts.

Mr. Sclater further sent the following correction :—

Dioptrornis amani.

I have again examined the type of *Dioptrornis fischeri amani* (Sclater, Bull. B. O. C. li. 1931, p. 112), and I regret to have to confess that a mistake was made in describing it. It is undoubtedly identical with *Alseonax cinereus kikuyuensis*, which has a wide distribution through eastern and south Africa from the eastern parts of Kenya southwards to Damaraland and Portuguese East Africa.

Mr. N. B. Kinnear exhibited several birds, and made the following remarks :—

(1) Mr. T. H. Manning, who recently spent nearly two years on Southampton Island, has presented to the British Museum a valuable collection of birds, including the young of several Geese, Ducks, and Gulls. As some of these are birds on the British List I am exhibiting the nestlings of the Lesser Snow Goose (*Chen hyperborea*), the Blue Goose (*Chen cærulescens*), the King Eider (*Somateria spectabilis*), and the chick and juvenile of Sabine's Gull (*Larus sabini*). There is also a juvenile and adult Grey Phalarope (*Phalaropus fulicarius*), and a male with undeveloped sexual organs in winter plumage, shot on June 26.

(2) During this last breeding season His Grace the Duke of Bedford has been kind enough to send to the Museum any young birds which have died at Woburn and were wanted for the collection In this way we have received downy young of both the Red-breasted Goose (*Branta ruficollis*) and the Emperor Goose (*Philacte canagica*), not previously represented in the collection.

Mr. Kinnear further exhibited a drawing belonging to Mr. J. H. Fleming of an apparently extinct Flightless Duck

from Campbell Island closely allied to *Nesonetta aucklandica* and recently described by him as *Xenonetta nesiotis*.

Mr. H. F. Witherby remarked that he had seen specimens of Waders taken in the spring which were moulting from winter dress into another winter dress, but not necessarily on the breeding grounds, as was the specimen of the male Phalarope in winter plumage exhibited by Mr. Kinnear.

NOTICES.

The next Meeting of the Club will be held on Wednesday, November 13, 1935, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Bird Room.

DEC 1935
UNCHARGED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXC.

The three-hundred-and-eighty-fifth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, November 13, 1935.

Chairman : Mr. G. M. Mathews.

Members present :—Miss C. M. Acland ; W. B. Alexander ; E. C. Stuart Baker ; D. A. Bannerman ; Miss P. Barclay-Smith ; Mrs. R. G. Barnes ; F. J. F. Barrington ; Brig.-Gen. R. M. Betham ; P. F. Bunyard ; Mrs. E. S. Charles ; Hon. G. L. Charteris ; A. Ezra ; Miss J. M. Ferrier ; H. A. Gilbert ; Miss E. M. Godman ; Capt. C. H. B. Grant (*Editor*) ; Col. A. E. Hamerton ; Dr. J. M. Harrison ; Mrs. T. E. Hodgkin ; P. A. D. Hollom ; Dr. E. Hopkinson ; Lieut.-Commdr. A. M. Hughes ; Major H. P. W. Hutson ; Rev. F. C. R. Jourdain ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low ; Dr. P. R. Lowe ; Rear-Admiral H. Lynes ; J. D. Macdonald ; C. W. Mackworth-Praed (*Hon. Treas.*) ; Col. R. Meinertzhagen ; C. Oldham ; B. B. Osmaston ; Mrs. D. Peall ; R. G. C. C. Sandeman ; D. Seth-Smith ; Miss D. L. Taylor ; Dr. A. Landsborough Thomson (*Hon. Sec.*) ; B. W. Tucker ; Miss E. L. Turner ; Mrs. H. W. Boyd Watt ; H. Whistler ; H. F. Witherby ; C. G. M. de Worms.

Guests :—Miss P. Barclay; Miss B. A. Carter; Miss T. Clay; N. B. Dyball; Mrs. M. V. Gilbert; A. A. Havers; Lt.-Col. R. F. Meiklejohn; J. E. Scott; C. M. N. White.

Dr. P. R. Lowe exhibited two hybrids between Pheasants and Black Game, and made the following remarks :—

Perhaps some of those present tonight will remember that in May 1934 (Bull. B. O. C. liv. 1934, p. 138 ; see also lii. 1931, p. 58) I exhibited before this Club four hybrids between Pheasants and Black Game.

Thanks to the kindness of Capt. Gilbert I am now exhibiting two more specimens : one a full-grown adult, which is almost an exact copy of the four examples I last exhibited, and the other quite a young bird.

The fully adult specimen I may dismiss with the remark that it was shot at Plowden Hall, Lydbury, in N. Shropshire, and that it is almost certain to be a male (although unsexed), because it is so exactly like the two males which we received in 1934 in the flesh, and which were sexed by dissection.

The bird passed round is immature, and is moulting into a plumage which looks as if, sooner or later, it would develop into one exactly resembling the fully adult specimen which I have just referred to or the four previously exhibited. I think it is fairly obvious that it belongs to the same category as these, except that in its very juvenile plumage its tail-feathers differ in being darker and not so barred.

This young bird is undoubtedly another male, for it was sexed by Mr. Morgan when he skinned it, and, in addition, one may see an enlarged oval plaque-like scale on the hinder part of the tarsus, indicating the spot where the spur would have subsequently broken through, if spurs ever did appear in these hybrids.

It was shot at Cusop, on the Herefordshire border, by Captain Vaughan Phillips, and is now the property of the Hereford Museum, to the Director of which institution we are greatly indebted for allowing it to be exhibited here tonight. This young bird is especially interesting as affording a valuable piece of evidence not only as to the identity of its own parents, but as to the parentage of the birds I previously

exhibited. You may remember that on the occasion of my former exhibit I said that to express an opinion as to whether the parents were Cock Pheasant and Grey Hen or Black Cock and Hen Pheasant was, in the present state of our knowledge, really guessing, although my own inclination, founded largely on conversations with Mrs. Haig Thomas, was to regard them as Cock Pheasant and Grey Hen.

I also said that whatever the cross was I had never seen the reciprocal cross, and we have not got one in the British Museum. Captain Gilbert thought this young Hereford Museum bird *was* a reciprocal cross, viz., one between Black Cock and Hen Pheasant. He has been kind enough to send me a letter from Captain Vaughan Phillips in answer to enquiries relative to its parentage.

Captain Phillips says: "I agree with you in nearly all cases—it is Black Cock and Hen Pheasant. But in my case, no! as the bird I shot got up with a Grey Hen (the Grey Hen was not shot at). A Black Cock had not been seen there for a long time before; neither have I seen the Grey Hen since—I believe she was the last one there. I have not seen any for miles around that part for many years."

This, of course, is not absolutely conclusive evidence of the parentage of our young hybrid, but it is, I think, very strongly in favour of its being Cock Pheasant and Grey Hen.

There is one other point. All the birds I have so far seen were males, and so were all the illustrations of others I have seen, and I feel strongly inclined to think that most, if not all, of the examples recorded by the Rev. F. C. R. Jourdain ('Zoologist,' x. 1906, pp. 321–330; *l. c.* p. 433; and 'British Birds,' vi. 1912, p. 146; see also Bull. B. O. C. lii. 1931, p. 6) as females were more than likely young males wrongly sexed originally, without dissection, as females. I hazard this suggestion because I believe that it is possible in certain crosses for only one sex (*e.g.* males) to be invariably, or almost invariably, thrown.

In support of this idea, which I rather think is novel among birds, I may mention, as examples among mammals, tortoise-shell cats, which are almost invariably females, and ginger cats, which are almost invariably males.

If I am right it may account for the extraordinary similarity in all the specimens we have seen at the Museum, ranging as they do over a period of 147 years (see Bull. B. O. C. liv. 1934, p. 139); it may also account for this hybrid not establishing itself.

Dr. Lowe also remarked on a recent influx of Jays into Hampshire:—

A very interesting movement of Jays has occurred this autumn in Hampshire, which doubtless some of you have heard about, and in which I know Mr. Witherby is interested. Our first notification at the British Museum of this movement was contained in a letter to Mr. Kinnear from Mr. John Berry, written on October 5 of this year, who said that Mr. Charles Stonor and himself had just been observing, between 8 and 9 A.M. that morning, a flock of between 250 and 300 Jays over New Hall, on the Itchen just outside Southampton, circling round and performing a series of acrobatics at a great height and suddenly swooping into some high trees, like Hawks "stooping." Mr. Berry shot one (which he sent to the British Museum), but the shot did not seem to alarm the others; they continued to fly over his head, and displayed no fear. The flock was about for over three hours. The day was still and misty, but not foggy.

On October 8 Major Maurice Portal wrote me a letter saying that Hampshire had been cursed with an influx of Jays passing over too high to shoot. He enclosed a letter from a friend—Mr. Alan Arnold—giving some details of this invasion. This letter was dated October 4, and Mr. Arnold says: "I was standing on the Winchester–Southampton road this morning at 9 o'clock, and a covey of Jays came over from the direction of this house, passing over the Home of Recovery entrance-gate, and flying towards Hutwood, about a gun-shot high. I counted them and there were 45; then they kept coming in 4's and 5's, and sometimes a few more in batches, and I counted up to 187 and had to leave. After the first covey they came higher and higher, and must have been 200 or 300 feet up, but you could'nt possibly mistake them

for any other bird—all the early ones I could see quite plainly."

Major Portal says that " here, viz., at Holywell, Swanmore, Southampton, on Oct. 3rd, 37 Jays passed high up. On Oct. 4th, 45 and 55 in two lots 3 miles off, but high up. Unfortunately none pitch in, but I'm sure some must drop in. Will you mind if you are sent up Jays for a bit ? Of course, I suppose they will be our British Jays, but a keeper shot three on Sunday and fed to ferrets, and told me they were ' wonderful tame '—which makes me wonder." Since these letters more communications from Major Portal have been received, and in one he relates how one keeper instructed to shoot Jays shot a number and did not send them " because he knew they were British Jays, and so no good for the investigation being made at the Museum," which introduces the humorous element into the enquiry.

It is absolutely clear, then, on the face of things that there has been an influx of continental Jays into England because, apart from the evidence which I have briefly referred to, everyone seems to be agreed that these Jays are very tame, and anyone who shoots Pheasants will know that a keeper cannot be sent out to shoot Jays in England and make a bag of fifty. These, and other bags which have been made, are manifestly impossible with British Jays.

There seems to be only one possible or conceivable alternative, which I think can be ruled out of court at once, viz., that these Jays are British Jays which, owing to adverse conditions of one sort or another elsewhere, or even owing to too favourable conditions, leading to an abnormal increase in the local populations, have flocked together and wandered off in search of more favourable localities and circumstances. All the evidence seems against such a rather far-fetched idea. Besides, we know that previous influxes of Jays have occurred, notably on the east coast (Ticehurst). But you will all very naturally say : if you think these Jays are continental immigrants why not compare them with topotypical examples from Scandinavia, or with others from other continental countries, or with British or Irish specimens Here you have just the very opportunity of making use of and justifying

the work of systematists who have distinguished the Scandinavian, British, and Irish residents as distinct races.

Well, that is just what we have been trying to do. Mr. Kinnear, thinking, no doubt, that I was more of an anatomist than a systematist, and therefore less likely to be biassed, asked me to undertake the enquiry.

Altogether about thirty-five of these immigrants have been skinned and compared with British, Scandinavian, Irish, and continental series. What has been the result? On the whole I think it has not been satisfactory; even with the aid of professed systematists accustomed and trained to appreciate the niceties of colour-tones.

Our series in the British Museum collection are perhaps not good enough, and there are various snags in the way. For instance, in the case of a British-killed series, with this present fresh evidence of a possible autumnal influx of continental examples it does not necessarily follow that all British-killed specimens are British born and so on. It therefore follows that our series, although so carefully labelled and dated, may be contaminated by wanderers. We want, so to speak, pure cultures or, in other words, series of pure natives or birds which we know have been bred in the different countries concerned.

At present, although you may have large series from different countries of autumn-killed birds spread out in a good light, I do not think that the identity of our thirty-five Hampshire immigrants could be said to be absolutely proved by the subspecies test; and the case is complicated by the similarity they present to Central European examples.

The case is also complicated by the fact that although in the mass series from different regions may be distinguishable, yet the identification of individuals is a proceeding so difficult, so nice, and so fortuitous as to give rise to the doubt as to the possibility of its being done, or, I may say, possible enough to be of practical use.

My conclusion, therefore, is that although we may feel absolutely certain in our own minds that these Jays came from somewhere on the Continent, our series of Jays from different countries is not perfect enough to justify us in making the statement that this has been proved by the subspecies test.

There is just one other point. Major Portal's series, after subtracting one or two examples which were probably British born, could in the mass be distinguished from Scandinavian and Irish examples, but the doubt has arisen in my mind if they can be distinguished from French or other continental birds.

In other words, I have begun to wonder if the area of distribution of this race, whatever it may be, may not include a slice of southern England as well as France, Belgium, and other countries.

Mr. Witherby and others joined in the discussion, and Mr. Witherby remarked that he considered the British Jay was a good race, and that it was possible some of the Jays sent to the British Museum were British bred birds. The others may have come from some part of the Continent other than Scandinavia.

The Rev. F. C. R. Jourdain introduced the subject of the taxonomy of the larger Gulls, which had been treated from a somewhat revolutionary standpoint by Stegmann in the Journ. f. Ornith. 1934, p. 340, etc., and which had been brought to the notice of British ornithologists by Col. Meinertzhagen's recent paper in 'The Ibis,' 1935, p. 762. The speaker confined his remarks to the Palæarctic forms of the *Larus fuscus–argentatus* group, and pointed out that most of the races replaced one another geographically, with the exception of *L. fuscus fuscus*, *intermedius*, and *graellsii*. These inhabited the same breeding territory as *L. argenteus* and *argentatus*. Stegmann in his paper laid some stress on the fact that in Holland interbreeding between the *fuscus* and *argentatus*. forms had been recorded. He adds that all intergradations are to be found there between *fuscus* and *argentatus*, so that sexual affinity exists between these forms. This seems to be much overstated. Prior to 1926 or 1927 *L. fuscus* was not known to breed in Holland, while on the other hand *L. argentatus* nested in great numbers. At first a few individuals appeared in Terschelling and Zeeland, and in 1928, 1929, 1930, 1931, and 1933 about eight cases of interbreeding were recorded, and in two of these cases one of the pair was apparently of mixed parentage. A somewhat

abnormal *L. fuscus* was also noticed in 1934 on Texel which may have been paired with a *L. argentatus*. When we consider the fact that normally the breeding season of *L. fuscus* is a fortnight later than that of the Herring-Gull, that many of the colonies are quite distinct, and that where they overlap no case of interbreeding has been recorded, except where a few individuals of *L. fuscus* have attempted to breed among huge colonies of the other species, it seems that far too much importance has been attached to these isolated cases, which are comparable with the cases of wild hybridism between *Passer domesticus* and *P. montanus*. If the three races *fuscus*, *intermedius*, and *graellsii* are regarded as forms of one species, or even if *antelius* and *taimyrensis* are included, there is no evidence of any two races of the *argentatus* group occupying the same breeding territory.

The insistence of American ornithologists on the necessity of intergradation as a necessity for subspecific status is the result of the study of the birds of a continent without great natural barriers in the form of lofty mountain ranges and arms of the sea. There is only one such feature in the North American continent, the Rocky Mountain system, which follows fairly closely the Pacific coast-line. On the other hand, in Europe many races are completely isolated, so that intergradation with neighbouring races is practically impossible. What is an article of faith in N. America has broken down in Europe owing to the very different environment. The dogma that each geographical race must be exclusive, and that two forms cannot breed in the same region except at the limits where intergradation usually takes place, may also break down; but in this case, at any rate, the evidence seems to be quite inconclusive.

Mr. Witherby considered that because ornithologists were unable to agree as to which species certain forms of these Gulls belonged was an insufficient reason for regarding them as one species, especially when this involved such a theory as had been propounded to account for two forms living side by side without interbreeding.

He also called attention to the fact that, while the *argentatus*

forms in western Europe were sedentary the *fuscus* forms were regular migrants.

Colonel Meinertzhagen reminded the Club that his paper in 'The Ibis' was no more than a review of Stegmann's paper and that he did not wish to lay down any definite opinion on the subject, but at the same time insisted, as he had already done in his paper, that if one is going to tackle the status of the *argentatus* and *fuscus* groups, one must deal with the whole group, and not with only a small part of it. Both Mr. Jourdain and Mr. Witherby had dealt solely with the western European forms, and if one confines one's enquiries and criticisms to them alone the problem is without difficulties.

If, as suggested by Mr. Jourdain, *fuscus*, *graellsii*, and *intermedius* are removed into the species *Larus fuscus*, it does simplify the problem for Europe, but what is one going to do with *antelius* and other black-backed and yellow-legged forms which occur in Asia. Neither Mr. Jourdain nor Mr. Witherby had got us any further. We were still in the age-old trough, murmuring dogmas and trying to get facts to fit theories, instead of facing the evidence, as Stegmann has done, and producing something constructive.

Miss C. M. Acland exhibited a Tawny Owl casting, largely composed of Kingfisher feathers.

Mr. P. F. Bunyard exhibited a series of Cuckoo and Reed-Warbler eggs and one Cuckoo's egg filled with sand, and read the following :—

To me the most interesting of my 1935 intensive Cuckoo observations are the results of experiments made with dummy Cuckoos' (*Cuculus canorus*) eggs. I selected eleven Cuckoos' eggs, none of which was from the nests of Reed-Warblers (*Acrocephalus s. scirpaceus*), and all were as unlike those by Cuckoos normally or permanently parasitic on Reed-Warblers as it would be possible to find. These were filled with fine sand until they weighed approximately the same as Cuckoos' eggs before being emptied—about 3·238 g.—Dr. Rey's average weight for unblown eggs. The holes were then hermetically sealed with paper which was carefully camouflaged. I found

that the presence of the sand, which only about half filled the shell, did not unduly affect the centre of gravity, and there was very little movement when placed on a level surface or in the nest-cup, definitely not sufficient to jerk the egg out of the mandibles, thus frustrating any attempt at removal. On the territory under observation there were thirty pairs of Reed-Warblers on which two Cuckoos were parasitic. Apparently, judging from the 1934 series of eggs, one of these Cuckoos was normally or permanently parasitic on this species, as is usually the case where there are extensive reed-beds both in North and South Kent. Seven of the filled eggs I placed in the Reed-Warblers' nests as substitutes for the Cuckoos' eggs found already deposited. Four were placed in Reed-Warblers' nests that were in the right condition to recieve a Cuckoo's egg—*i. e.*, when the nests contained two or three fresh eggs of the fosterers. All eleven eggs were accepted by the fosterers, not one was deserted, neither was I able to detect any effort on the part of the Warblers to eject or build over them ; in fact in some cases they remained in the nests with the newly-hatched young of the fosterers until recovered on the last day of my visit. The experiments were made for the purpose of disproving (or otherwise) the theory that assimilation between the eggs of the Cuckoo and those of fosterers was the result of selection—*i. e.*, that Cuckoos' eggs which did not somewhat resemble those of the fosterers were ejected by them.

Unfortunately this theory has been enlarged upon and supported by certain oologists who have too hastily believed that Cuckoos' eggs found outside or near nests had been ejected by the fosterers. Personally I refuse to believe, owing to their weight and size, that small birds, at least, are capable of ejecting a Cuckoo's egg. Has anyone ever witnessed the ejection of a Cuckoo's egg by the fosterers ? I have seen a great number of Cuckoos' eggs *in situ*, but not once have I found one outside or near the nest ! Eggs found in such positions were most probably due to carelessness on the part of the Cuckoo during deposition, or possibly to the fact that she was at the time disturbed by the fosterers or the observers before she had time to place the egg in the

nest. Among the enormous number of Cuckoos' eggs referred to by Dr. Rey ('Old and New Information concerning the Domestic Economy of the Cuckoo') only seventeen similar cases are enumerated, desertions excepted. It has also been definitely proved that a Cuckoo can, and does, transfer her eggs from one fosterer's nest to another. Mr. Scholey has several records in support, and I had definite proof of this in 1934. No one who cares to take the trouble to study a large series of British-taken Cuckoos' eggs from the nests of Reed-Warblers will deny that assimilation exists: it undoubtedly does so as regards the ground-colour; it is, however, not so apparent in the arrangement and coloration of the markings. Many Cuckoos in certain parts of North and South Kent, where large reed-beds exist, systematically parasitize the Reed-Warbler, and probably have done so for centuries. Consequently here we find almost perfect assimilation, but not yet so perfect as we find in the eggs of the Great Spotted Cuckoo (*Clamator glandarius*), which is permanently parasitic on various species of Corvidæ; but I am definitely of the opinion, as Dr. Rey suggested, that this assimilation has been brought about not by selection, but by environmental food conditions. Obviously Cuckoos permanently parasitic on a given species would quite naturally continue to show a preference for the food on which they themselves were brought up. As will be seen from the large series of Cuckoos' eggs exhibited, all from birds permanently parasitic on Reed-Warblers, they are remarkably constant to type in coloration, shape, and size. They have undoubtedly become locally fixed through the influence of heredity. So much so, in fact, that to the practised eye it is quite easy to detect eggs from Cuckoos that are not permanently parasitic on this species—*i. e.*, where the Warblers are only used under the stress of necessity, and when there are no nests available of their normal fosterer. I exhibit a few clutches to illustrate this interesting point. Mr. Scholey and I have conclusively proved that a Cuckoo permanently parasitic on Reed-Warblers very rarely uses the nests of any other species except under abnormal conditions, and then only occasionally the Sedge-Warbler (*Acrocephalus schœnobœnus*). In 1923, however,

Mr. Scholey found eight eggs belonging to a Cuckoo that he claimed was parasitic on the Hedge-Sparrow (*Prunella modularis occidentalis*). A careful comparative study of these eggs with a large series of eggs by Cuckoos parasitic on Hedge-Sparrows leads me to the definite conclusion that these eight Cuckoos' eggs are from a Cuckoo normally parasitic on Reed-Warblers. The conclusion is not entirely unjustified, as doubtless it will be remembered that the season of 1923 was a cold and wet one. The reeds were very backward, with the result that there were no Reed-Warblers' nests available, and she was compelled to use the Hedge-Sparrow's four times, Linnet (*Acanthis c. cannabina*) twice, and Reed-Bunting (*Emberiza s. schœniclus*) and Greenfinch (*Chloris c. chloris*) once each. Or possibly she was forestalled by the Cuckoo already in possession of the Reed-Warbler territory, and compelled to become partially parasitic on the Hedge-Sparrow.

The results of the experiments, so far as they go, are conclusive evidence against the theory of assimilation being the result of elimination by selection. It is, however, possible in the case of the Reed-Warbler that these birds have become so accustomed to receiving Cuckoos' eggs that they readily accept them as the result of some irresistible influence in the process of parasitism and an inherent knowledge that part of their life-history is to accept the egg of the parasite and bring young Cuckoos to maturity. Thirteen Reed-Warblers' and two Sedge-Warblers' nests were raided by the two Cuckoos; in one of the latter the five newly-hatched young were all taken.

[See Lottinger, 'Le Coucou, Discours apologétique ou Mémoire sur le Coucou, Nancy,' 1775; 'Histoire du Coucou d'Europe,' Strassbourg and Paris, 1795; and C. F. M. Swynnerton, 'Rejections by Birds of Eggs unlike their own, with remarks on some of the Cuckoo Problems," Ibis, 1918, pp. 127–154.—Editor.]

Mr. Bunyard also exhibited a Reed-Warbler's nest, and made the following remarks:—

The nest I exhibit was collected during the 1934 drought, when many of the ditches were quite dry. It is made almost entirely of aquatic weeds collected from the bottom of the ditches, proving conclusively a point that I have so frequently stressed, *i. e.*, that birds will adapt themselves to environmental conditions as far as nesting materials are concerned.

It is stated in 'The Practical Hand-book' that feathers are used. I must have seen hundreds of Reed-Warblers' nests *in situ*, but in not one have I seen feathers employed, in spite of the fact that many of the ditches had farm-buildings near their banks.

While inspecting a Reed-Warbler's nest with newly-hatched young, I heard an alarm-note that was quite new to me, apparently caused by the snapping together of the mandibles. I have heard a similar note made by the Grasshopper-Warbler (*Locustella n. nævia*) when a pair had young.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following note on the races of the Herring-Gull which visit Eastern Africa in the non-breeding season :—

Neumann, Bull. B. O. C. liv. 1934, p. 133, has cleared up the question of *Larus heuglini* and *L. taimyrensis* and has given good characters for distinguishing *L. heuglini* from *L. cachinnans* (p. 134, para. 1). We agree with this decision and the arrangements of groups as given by Peters, Bds. World, ii. 1934, pp. 316–318, but are unable to agree with Stegmann, J. f. Ornith. 1934, p. 340, who joins the *L. argentatus* group with the *L. fuscus* group, as they are separable on structural characters, as pointed out by P. R. Lowe, 'Our Common Sea Birds,' 1913, p. 174. Dwight, Gulls World, 1925, has made *L. cachinnans* a species, and has placed *L. fuscus antelius* as a synonym of *L. f. taimyrensis* and *L. heuglini* as a synonym of *L. cachinnans*.

Meinertzhagen, Nicoll's Bds. Egypt, ii. 1930, p. 607, follows Dwight. Dwight is mistaken in stating that *L. cachinnans* has no streaks on head in winter dress.

We agree with Dwight that *L. f. antelius* is a synonym of *L. taimyrensis* (=*L. argentatus heuglini*), as the type of *L. f. antelius* agrees perfectly with specimens from the Yenesei Valley.

Our examination of the series of Herring-Gulls in the British Museum collection induces us to believe that too many races have been described, and that others besides *L. antelius* will eventually become synonyms, but we are satisfied that only one race occurs in Eastern Africa during the non-breeding season, and this is *Larus argentatus heuglini* Bree, Bds. Europe,

2nd ed. v. 1876, p. 58 : Zeila, British Somaliland, of which *Larus affinis taimyrensis* Buturlin, Orn. Mitt. 1911, p. 149 : western shores of the Gulf of Yenesei, and *Larus fuscus antelius* Iredale, Bull. B. O. C. xxxi. 1913, p. 69 : Langiorskaja, Ob River, Western Siberia, are synonyms.

When in Africa the Siberian Herring-Gull (*L. a. heuglini*) has only been found on the sea-coast, but the Lesser Black-backed Gull (*L. f. fuscus*) occurs both on the sea-coast and on inland fresh-water lakes as far south as Lake Nyasa.

Mr. David Bannerman sent the following communications on four new records of birds from West Africa :—

My first record is that of a specimen of *Canirallus oculeus oculeus* from Igoriaki, near Benin, sent to the British Museum by Mr. D. S. Cowan. It is of particular interest as not only being the first skin obtained of this Rail in Nigeria, but as proving that the typical form ranges as far east at any rate as Benin. Hitherto it was known to extend from Liberia to the Gold Coast, another race (*C. o. batesi*) being found from Cameroon Mountain eastwards. Until Mr. Cowan obtained this specimen we did not know which of these forms inhabited Nigeria. It is now definitely proved to be *C. oculeus oculeus*.

Just the opposite case is shown in a specimen of the Yellow-bill (*Ceuthmochares*). A specimen was recently sent to the British Museum which had been shot by Mr. D. S. Cowan at Igoriaki near Benin. This bird we should have expected to belong to the subspecies *C. aereus flavirostris*, which we know ranges from Gambia to Lagos, but to my surprise it is a specimen of the typical race *Ceuthmochares aereus aereus*, which is known to range from Western Cameroon to N. Angola and also occurs on Fernando Po. Its presence in Benin is not only a considerable extension of the bird's known habitat, but is another case where the Cameroon race is found ranging into the southern Nigerian forests.

When we know more about the races of birds in the Benin area we may find that the majority have their affinities with Lower Guinea rather than (as is the case with the Rail (*Canirallus oculeus oculeus*) with the Upper Guinea fauna.

I have next to record, for the first time, a specimen of the Crested Guineafowl (*Guttera edouardi pallasi*) from Nigeria—an example having been shot by Mr. H. F. Marshall at Sabon Gidda, Benin Province, on Sept. 24, 1934, and sent to the British Museum. Although it was to be expected that this would be the race found to inhabit S. Nigeria, yet its confirmation by a skin was welcome, particularly as another subspecies has been described from the Sanaga River in Cameroon. This definitely extends the range of *Guttera edouardi pallasi* from Portuguese Guinea to Southern Nigeria (Benin).

A few months ago, during last session (continued Mr. Bannerman), I received a visit from a Mr Glynn, who had recently made a trip round Lake Chad, and who had seen a flock of White Nile Long-toed Lapwings (*Hemiparra crassirostris crassirostris*) in the neighbourhood of the lake, on the southern British shore. From Mr. Glynn's detailed description there could be no doubt that this was the bird whch Mr. Glynn saw. He picked it out at once when shown various Plovers, and though no specimen was secured I am satisfied in my own mind that it has been correctly identified. Unfortunately Mr. Glynn failed to send me the date and exact locality, which he promised to do after consulting his diaries. It seems, however, a sufficiently valuable record to publish, as it was omitted from vol. i. of my ' Birds of Tropical West Africa,' never having occurred before so far west.

Mr. C. G. Bird sent the following note on the Eastern Calandra Lark from southern Asia Minor :—

While with Mr. E. K. Balls's expedition to Asia Minor in 1935, a full account of which will be given in ' The Ibis,' a series of *Melanocorypha bimaculata* was collected. These birds are at once to be distinguished from typical *M. bimaculata* by the redder colouring of the mantle and the lower back. The specimens are discoloured to some extent on the breast, around the beak, and the tips of the tail-feathers ; however, I am satisfied that the colouring of the back and mantle is not due to discoloration. These birds are to be found on bare

semi-arid country, where the colour of the ground varies from white to reddish-brown. I have examined all the specimens of *M. bimaculata* in the British Museum, and amongst which I find there are sixteen similar reddish birds from the Sudan, obviously the wintering birds from Asia Minor. Col. R. Meinertzhagen (Ibis, 1935, pp. 126 and 127) also noted the presence of this red form in Syria. He collected three specimens in the Jebel Druze ; he also possesses specimens from the winter quarters in Egypt and the Sudan.

Measurements of ten specimens from Gaziantep, Asia Minor :—

Nine males, 115–123 mm. ; exposed culmen 16–18 mm.

One female, 110 mm. ; exposed culmen 17 mm.

In the list of Brehm types in the Tring Museum (Hartert, Nov. Zool. xxv. 1918, p. 17) there is given the type-specimen of *Melanocorypha rufescens* from the Blue Nile ; Hartert regarded this bird as *M. bimaculata*. In Brehm's original description of this bird he compares it with *M. calandra*, and points out how much redder it is than that species—in fact the description fits well the birds from Asia Minor and Syria ; also he says it is a winter visitor to the Sudan, where the type was shot. On the strength of these two accurate descriptions (references below) I propose that the name *M. rufescens* should be revived for the birds which breed in south Asia Minor and Syria and winter in Egypt and the Sudan.

Melanocorypha bimaculata rufescens C. L. Brehm.

Melanocorypha rufescens C. L. Brehm, Vogelgang, 1855, p. 120, and Naumannia, 1856, p. 375.

Type.—♀, Blue Nile, December 1850 ; coll. A. E. Brehm.

Distribution.—Breeding in Asia Minor and Syria, migrating to Egypt and the Sudan in winter.

Mr. E. C. Stuart Baker forwarded the following notes on a new subspecies of Owl :—

Strix indranee shanensis, subsp. nov.

Description.—The present race is intermediate between *S. i. newarense* of the Eastern Himalayas and northern Burmese hills, and *S. i. maingayi* of South Burma and the Malay States.

Distinguished from *S. i. newarense* by its general, much darker colour and by the absence of all brown on the breast, while the crown is practically black instead of almost concolorous with the back. From *S. i. maingayi*, to which it is really closer than to *S. i. newarense*, it differs in being generally darker, browner or less foxy brown, and in having the crown and nape almost black instead of deep chocolate-brown and more sharply defined from the back. It also differs from all three races of *S. i. indranee* in having the white throat-patch very much more extensive.

Type.—In the British Museum; taken at Sintaung, Shan States, elevation 6000 feet, by Judson Carrott. Captured April 1933, killed March 1935. Brit. Mus. Reg. no. 1935.10.7.1.

Measurements.—(1) Female, wing 395 mm.; tail (imperfect) 231; culmen from front 48, depth 21; tarsus 60; middle toe without claw 44. (2) Male, wing 355 mm.; tail imperfect; culmen from front 43, depth 19; tarsus 53; middle toe without claw 35.

Remarks.—The two specimens of this fine Owl were sent home to me to identify by Mr. Judson Carrott, who had them in captivity for a little under two years. In general appearance they exactly resemble two birds obtained by Mr. T. R. Livesey in the Shan States, which were then identified by Mr. Livesey as "*S. newarense*, but differing in depth of colour and almost black heads." Two other specimens were also sent me many years ago, and these I described as "*S. indranee*, nearest to *S. maingayi* but darker, with almost black crowns and very white throats."

A very young bird, unable to fly, is described by Mr. Livesey as follows:—"The young bird has the cowl silvery white, the disk very dark, underparts biscuit-fawn faintly barred; almost white under chin; feathers of tarsus and toes fawn white, not barred; bill bluish white."

Mr. Gregory M. Mathews sent the following description of a new subspecies of Gadfly-Petrel from New Zealand:—

Pterodroma kidderi okahia, subsp. nov.

Description.—Differs from *P. k. kidderi* (Coues) in being much darker above and below.

Distribution.—The new form probably breeds in some of the islands off New Zealand.

Type.—In the Wellington Museum, New Zealand. Taken at Ohakia, New Zealand, on July 16, 1934.

Measurements.—Wing 254 mm. ; tail 103 ; culmen 26.

Remarks.—Specimens of *P. k. kidderi* from Kerguelen Island, where they breed, are very uniform in coloration. Wing 265 mm. ; tail 112 ; culmen 28.

Mr. C. M. N. White sent the following description of a new subspecies from Fergusson Island :—

Monarcha chrysomela prærepta, subsp. nov.

Description.—Male not distinguishable from that of *M. c. aruensis*. Female deeper yellow than female of *M. aruensis* on the underside, and lacking the olive wash on the sides of the body ; breast almost always without any olive wash ; above yellower, especially on head and lower back. In typical *M. aruensis* there is always a very distinct olive wash on the breast and sides of body, leaving only the centre of the underside yellow.

Distribution.—D'Entrecasteaux Islands and S.E. New Guinea, apparently tending to intergrade with *aruensis* in S.W. New Guinea.

Type.—♀, Fergusson Island, 24. v. 97, A. S. Meek Coll. Brit. Mus. Reg. no. 98.4.30.39.

Material.—*M. c. aruensis*, 10 ♂♂, 5 ♀♀, Aru Islands. *M. c. prærepta*, 2 ♂♂, 8 ♀♀, Fergusson and Goodenough Islands ; 5 ♂♂, 5 ♀♀, S.E. New Guinea (Kotoi, Kubuna, Milne Bay, Hydrographer Mts.) ; 3 ♂♂, 2 ♀♀, S.W. New Guinea.

Measurements.—The type has a wing of 69 mm. There is no geographical variation in size, and combined wing-measurements of females are 66–69 mm.

Remarks.—2 ♀♀ from the Hydrographer Mts., S.E. New Guinea, are peculiar in having a dusky olive wash on the breast and sides, but are the only anomalous examples in the above series, and would appear to require further elucidation. 2♀♀ from S.W. New Guinea are nearer to *aruensis* in colour, but lack the distinct olive wash of that form.

Dr. Meise (Orn. Monatsb. 1934, p. 79) points out that *Pœcilodryas nitida* De Vis (Ibis, 1897, p. 376 : Boirave) is in reality the female of a form of *Monarcha chrysomela*, and

refers it to *M. c. aruensis*. The name is, however, preoccupied by *Monarcha alecto nitida* Gould (1841), so a new name is required in any case.

I should like to express my thanks to Dr. Ernst Mayr for his kindness in lending a series of females of the new form to confirm the more limited series available in London.

NOTICES.

The next Meeting of the Club will be held on Wednesday, December 11, 1935, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

The Chairman will deliver his Annual Address.

10 JAN 1936
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXCI.

The three-hundred-and-eighty-sixth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, December 11, 1935.

Chairman : Mr. G. M. Mathews.

Members present :—Miss C. M. Acland ; W. B. Alexander ; D. A. Bannerman ; Miss P. Barclay-Smith ; F. J. F. Barrington ; P. F. Bunyard ; H. P. O. Cleave ; J. Delacour ; Miss J. M. Ferrier ; H. A. Gilbert ; Capt. C. H. B. Grant (*Editor*) ; R. E. Heath ; E. Hopkinson ; Rev. F. C. R. Jourdain ; Dr. N. H. Joy ; N. B. Kinnear ; Miss E. P. Leach ; B. Lloyd ; Dr. G. Carmichael Low ; Dr. P. R. Lowe ; Dr. N. S. Lucas ; Rear-Admiral H. Lynes ; C. W. Mackworth-Praed (*Hon. Treas.*) ; J. H. McNeile ; Lieut.-Col. H. A. F. Magrath ; Col. R. Meinertzhagen ; T. H. Newman ; C. Oldham ; Mrs. D. Peall ; Miss G. M. Rhodes ; Dr. B. B. Rivière ; R. G. C. C. Sandeman ; W. L. Sclater ; D. Seth-Smith ; Major A. G. L. Sladen ; C. F. M. Swynnerton ; Dr. A. Landsborough Thomson (*Hon. Sec.*) ; B. W. Tucker ; Miss E. L. Turner ; H. M. Wallis ; Mrs. H. W. Boyd Watt ; H. F. Witherby ; C. G. M. de Worms.

Guests :—T. R. Bell ; Miss T. Clay ; Mrs. H. A. Gilbert ; J. L. Hawkins ; W. A. Smallcomly ; G. H. Swynnerton.

The Chairman (Mr. G. M. Mathews), during his Annual Address, exhibited drawings showing Albatrosses, Petrels, and the ossification of certain tendons in the patagial fan of Tubinares.

Chairman's Annual Address.

During the year the Club has lost by death three of its members—John de la Touche, well known for his excellent work on the birds of China; Dr. William J. Adie, an Australian who was working in London and was a keen supporter of the Club; and Frederic W. Styan, one of the older generation, also interested in Chinese birds. The Union has also lost George Bolan, William Raw, Lord Hyde, Sir John Rose Bradford, F. H. Barclay, Col. J. L. Francia, and A. E. Elliott.

Two specimens of the Great Auk (*Alca impennis* L.) from the Rowley collection were purchased at Stevens' by Capt. V. Hewitt for 480 and 500 guineas respectively, while six Great Auk's eggs were sold for sums varying from 100 to 300 guineas. Two of these latter were purchased by the Rev. F. C. R. Jourdain.

After fifteen years in charge of the Ornithological Collection at the British Museum (Natural History), Dr. Percy Roycroft Lowe, B.A., M.B., O.B.E., retired on January 2, 1935, at the age of sixty-five. The various innovations introduced by Dr. Lowe into the arrangement of the National Collection of bird-skins, together with card indices of faunal papers, systematics, etc., and the re-arrangement of the osteological and spirit collections, have greatly increased the utility of the collection as a whole. Since his retirement Dr. Lowe has continued his anatomical researches and has been an almost daily visitor to the Museum. He has been succeeded by Mr. N. B. Kinnear. Preparations have been completed for the removal of the Museum's ornithological collection into a new building recently erected on the site of the old Whale Gallery, and this will take place shortly.

On June 11 and 13 last the International Committee for Bird Preservation met at Brussels, the British Ornithologists' Union being represented by Mr. W. L. Sclater. Three meetings were held, and a draft of a proposed Convention for the

Protection of Birds in Europe drawn up by the Scandinavian delegates was found on discussion to be too elaborate and detailed to be acceptable to the legislatures of the various countries concerned. A small committee was accordingly appointed to draw up a series of more simple propositions. Dr. P. R. Lowe was elected to this committee, while Miss P. Barclay-Smith was elected an additional Secretary for the British Empire and Monsieur Jean Delacour President of the European Section.

From June 21 to 29 last Mr. David A. Bannerman represented the British Ornithologists' Union and British Ornithologists' Club at the Tercentenary Celebrations of the Musée National d'Histoire Naturelle in Paris.

Dr. James P. Chapin has been awarded the Daniel Giraud Elliot Medal by the National Academy of Sciences in Washington for his work on the Birds of the Belgian Congo.

In April Mr. B. W. Tucker, in company with Messrs. H. J. R. Pease and G. K. Yeates, visited South Spain for the purpose of field-study of the rich bird-life of Andalucia. They visited the Marismas, the Coto Doñana, the Laguna de la Janda, and the neighbourhood of Vejer, the Gibraltar district, and the Sierras, and saw 180 species in three weeks. Next year we hope that Mr. Tucker will give us an account of this work.

Regional Review (*October* 1934 *to October* 1935).

EUROPE.

Mr. HUGH WHISTLER spent a month in Albania during the spring.

Major W. M. CONGREVE directed his ornithological acitivities to Finmark, while Dr. J. M. HARRISON visited Macedonia during April and May.

ASIA.

Mr. A. S. VERNAY has been engaged on an expedition to Upper Burma.

Messrs. F. LUDLOW and G. SHERRIF concluded their expedition in Eastern Bhutan with a total of about 700 bird-skins.

Arabia.

Mr. St. John Philby is to continue his collecting in Arabia.

Africa.

Mr. Willoughby P. Lowe returned from his second trip to Ashanti, having made further zoological collections.

Rear-Admiral H. Lynes and the Rev. F. C. R. Jourdain carried out an ornithological trip to Egypt and Palestine during the spring.

Mr. Jack Vincent has gone to Zanzibar to take charge of an essential oils distillery, and will no doubt turn his attention to the avifauna of that island as opportunity occurs.

Literature.

Hachisuka, Marquess, 'Birds of the Philippines,' vol. ii. completed.

Steinbacher, Dr. F., continues the publication of his Erganzungsband to Dr. Ernst Hartert's 'Die Vögel der paläarktischen Fauna.'

Howard, Eliot, has published his 'Nature of a Bird's World.'

Whistler, H., has published a second edition to his 'Popular Handbook of Indian Birds.'

Bergman, Sten, 'Zur Kenntnis Nordöstasiatischer Vögel.' A valuable contribution to the ornithology of Kamtschatka and the Kurile Islands, with their widely differing avifauna.

Glegg, W. E., 'History of the Birds of Middlesex.' A useful companion volume to his 'Birds of Essex,' which brings the account of Middlesex birds up to date.

Taverner, P. A., 'Birds of Canada.' A work which deals with the birds of Canada as a whole, and illustrated by the author and Major Allan Brooks.

Baker, E. C. Stuart, has completed his 'Nidification of Birds of the Indian Empire' with the publication of the fourth volume.

Griscom, Ludlow, 'The Ornithology of the Republic of Panama,' being primarily a check-list of the region.

Priest, Captain C. D., has published his third volume of the 'Birds of Southern Rhodesia.'

The Ossification of certain Tendons in the Patagial Fan of Tubinares.

The ossicles found in the muscular part of the elbow of certain Petrels is well known, and has been commented on by Forbes in part xi. of the 'Voyage of H.M.S. *Challenger*,' 1882, who gave plates showing these bony nodules or wing-ossicles. Meckel and Reinhardt had previously noted them, and perhaps many others. Beddard in 'Structure and Classification of Birds' in 1898, p. 447, also comments on them. In Newton's 'Dictionary of Birds,' 1896, Gadow, on pp. 606–607, discusses the patagial muscles.

Some years ago I received a skeleton of *Diomedella cauta* picked up on the beach; on the humeral process was a bone dried on by the cartilage; and in a skeleton of *Puffinus griseus*, also picked up on the beach, I noticed a similar bone. Discussing this matter with Major Allan Brooks, when in London in April 1935, he said that in some Petrels this bone had an articulating (?) surface with the humeral process, the other end connecting to a tendon, and he gave me two drawings, one showing this and another showing a cartilage connecting the bone to the humeral process. (I do not think this bone has an articulating surface. It seems always to be joined by cartilage both to the humeral process and to the ossicle, seated on this process.) A "bone" sent me by Brooks from the wing of "*T. cauta*," and considered by him to show an articulating surface, proves to have the small ossicle connected to the moklosteon by very hard, "almost bone," cartilage. In my own example this cartilage has ossified.

Now we do find that in certain of the Procellariidæ there is a very marked "bone" that occurs in the elbow, and the humeral process pushes out to meet it, to which it seems always to be connected by cartilage. What is the object of this? Is it conceivable that when the wing is outstretched, as in flying, this spreader would be of advantage? We would get triangulation, and the tendons would then be supported in the middle, where support would be most needed, and

give greater command over the wrist. Weight in a bird must be kept down and flexibility maintained, as is the case with ribs connecting the vertebral column with the sternum, which allow heaving and expansion.

With this spreader-bone replacing ligaments we get a more efficient state; flexibility remains unimpaired, and foldability also, as the spreader folds back to lie near the humerus-shaft.

The wings of the Procellariidæ are abnormally long in proportion to weight; and the birds spend many weeks of each year on the wing, mostly over the inhospitable seas. This mode of life may account for the abnormal arrangement of the spreader-bone, or moklosteon found in some of the Petrels. This bone has two obvious effects: (1) to stiffen or brace the wing in the rigging of its weaker part—forward of the elbow; and (2) to make full use of the patagial fan. This spreader is an avian-mechanical device to improve the efficiency of its wing-spread.

How has this improvement been effected? Was it by the gradual ossification of what was originally a tendon (and still is in some forms, either partially or wholly)? This ossification, now a definite bone in the subfamilies Procellariinæ and Bulweriinæ and in the family Diomedeidæ, spans the distance from the forward projecting process of the distal end of the humerus to the muscle patagialis longus, thus giving a strut-support where before such was lacking. The spreader is, in its full development, of quite a characteristic or individual shape, having a hinged surface at the humeral end, a pronounced belly in the middle, and is attached at its distal end to the tendon patagialis longus. It appears to be formed from the muscle patagialis brevis, or rather its tendon, by gradual ossification. Sometimes the cartilage connecting the moklosteon to the ossicle on the humeral process hardens into a bone, when it is called the sanosteon.

Though this ossicular development of the brevis (of the extensor metacarpi radialis longior) at the elbow has been remarked upon by several workers, and has been mentioned particularly with regard to certain Tubinares, and noted as present in *Steganopodes* and also in *Merops*, the spreader does not appear ever to have been recorded as a fully functioning

bone of characteristic shape as now appears; so far, at least, I cannot find a reference to it.

Forbes, pp. 27–28, says that " in the Diomedeinæ the relations of the ossicles are very nearly as in *Procellaria*, but the tendinous band to the ulnar fascia—which represents the morphological termination of the tensor patagii brevis—arises in the Albatrosses nearer the middle of the fibrous tissue lying between the two ossicles. The tendon of origin of the superficial part of the extensor metacarpi is double. The proximal and smaller of these two ossicles is developed in the more superficial of these twin tendons. The larger of the two ossicles is somewhat different in shape in the Albatrosses and Petrels, being more hammer-shaped in the latter group.

" These bones must be considered to be of the nature of sesamoids, which, as is well known, are often developed in the tendons of muscles at the points of greatest strain. Their occurrence therefore in different groups of birds is by no means a proof of any genetic connection between such."

This refers to the " peculiar wing-ossicles " which Forbes thought were confined to the Diomedeinæ and the genera *Procellaria*, *Adamastor*, *Puffinus*, *Bulweria*, and *Pterodroma*. I consider it to be much more important than a " wing-ossicle "—in fact a spreader, as such.

We can imagine that this bone is quite a recent development, and is still developing.

So far this spreader bone, or os obex, has been found in the super-genus *Puffinus*, and in *Procellaria*, *Pterodroma*, *Bulweria*, *Diomedea*, and the Mollymawks.

Apparently size does not control it, as the spreader has not yet been found in *Macronectes*, which is just as large as a Mollymawk, but is not a glider—it flaps its wings. It is also absent in the subfamily Fulmarinæ (*Daption*, *Fulmarus*, *Thalassoica*, *Priocella*), the subfamily Pachyptilinæ (Prions), and the families Thalassidromidæ and Pelecanoideidæ (*Pagodroma* [?]).

This, of course, is subject to further proof, as I am speaking with the little knowledge I have to date. The patagial fan in the genera and families mentioned in the last paragraph

seems to differ from that of the first-mentioned genera according to Forbes.

Forbes has shown a small ossicle seated on the humeral process of *Procellaria æquinoctialis* and *Diomedea exulans* which is very similar to what I find in *Puffinus puffinus*. This ossicle is not part of either the process or the spreader; to the latter it is joined by cartilage.

In *Pterodroma lessoni* no such ossicle is shown, and this, we find, is very similar to the same part in *Pterodroma inexpectata*, where the spreader is joined by cartilage to the process on the humerus.

Summary.

The "spreader" derives by ossification of the tendon brevis—more fully designated tendon propatagialis brevis.

It is not a process of the humerus, although the humeral process exerts itself to meet the ossifying spreader.

Its function is to support the wing-framework in a needed part and to increase the surface of the patagium by keeping it fully spread.

Mr. Robin Kemp, to whom I sent an old dried wing of *Puffinus puffinus* to make into an exhibit to show the spreader, writes: "The left wing has just now opened out straight, and presents the whole mechanism. It is a mechanism which fills me with wonderment. It is like a long steel girder arrangement with ties and struts, and yet it all folds back quite compactly, in a solid flattish whole. Of course the fleshy parts of the muscles are gone. It is quite noticeable that the spreader bone packs up above, or outside of, the plane formed by the rest of the mechanism. That is to say, when the wing is closed the spreader lies on the outside of the humerus and not between the humerus and radius. If the fleshy muscles were *in situ* this point would not be quite so obvious."

I am also indebted to Kemp for working up the wings of *Diomedea exulans* and for the drawing he made of the patagial fan, which, of course, agreed with the drawings made by Forbes in the 'Challenger' Report, 1882, pt. xi. pl. 4. Kemp says "the muscle which I have particularly reddened in the extended drawing of the patagial fan is very definitely a muscle, arising

fleshy from a ridge of what you have named moklosteon turning to tendon as it runs wristwards. This makes the spreader a decidedly more important bone that it would be otherwise, and, incidentally, may be the reason, or one of the reasons, for its creation, in order to get a more centralized foundation for a muscle to help in the control and strengthening of the wrist—where tremendous strains must come with such a fearsomely long span—for beyond the wrist are the primaries."

Kemp further says of the wing of the Sooty Albatross: "I feel satisfied that the sketch showing the spreader, with a distinct turning towards the wrist, is the natural set, in the extended wing. The angle is greater than in *D. exulans*, where the spreader is more at a right angle. In the Sooty Albatross, if one takes the humerus in one hand and the ulna and radius in the other, and carefully closes the wing, there comes a point, when the bones are about at right angles, at which a jerk occurs, almost like an inaudible click, and it is at this point that the humerus begins to overtake the spreader and tendon, which, if continued on, brings the two (*i. e.* the humerus and the tendon and spreader) to the parallel position when closed. It is not evident what occurs to make the change just where it does occur in the elbow."

In *D. exulans* the spreader is very definitely connected to the ossicle by a strong tendon or cartilage; in fact that forms its mainstay to the framework, and below or behind that cartilaginous tendon is another less cartilaginous tendon from spreader to humeral process. This can be seen quite clearly in the extended wing of *D. exulans* when examined.

Now, as to the Sooty Albatross the story is altered because of considerable development in the arrangement. We can no longer think in terms of an ossicle. That, together with the tendon (which in *D. exulans* is separate) and the chief tendon or cartilage also (spreader to humeral process), have all three here become as one strongly ossified continuation of the spreader. So that we have an elongated spreader (formed of original spreader, plus upper tendon, plus lower tendon, plus ossicle) which to all intents and purposes has now become one bone, the os obex—no flex can be detected in it.

But that underneath tendon may have left a fragment behind (one cannot be sure), but this would not affect the foregoing statement.

Furthermore, the movement of the spreader upon the humeral process in *D. exulans* is in part the ossicle twisting on its seat on the process and in part the bending or flex of the tendon, spreader to ossicle. But in the Sooty Albatross this movement is confined to the twisting of the humeral end of the spreader (which used to be the " ossicle ") upon the humeral process.

This concluded the Chairman's Annual Address.

Colonel MEINERTZHAGEN, referring to a recent note in 'British Birds,' where it was stated that a Jay was unable to carry more than three acorns, exhibited a specimen of the Nutcracker (*Nucifraga c. caryocatactes*) whose throat and mouth contained twenty-eight hazel nuts (also exhibited). The throat did not appear unduly inflated, but all the nuts were squeezed out of the bird after death. The bird was one of a party eating nuts in Estonia. They were watched taking them to a log or stump, where they were disgorged and hammered before eating the kernel.

Colonel MEINERTZHAGEN also referred to a note by Mackworth-Praed and Grant in the last number of the 'Bulletin' (p. 33). A large series of *Larus fuscus antelius* was compared with a large series of *Larus fuscus taimyrensis* in the Leningrad Museum, and the shade on the mantle of the former is distinctly darker than in the latter, females being often darker than the males. The distinction is not great, but very real, and there can be no question that the race *L. f. antelius* must be recognized. The single type of *L. f. antelius* in the British Museum, when compared with two or three *L. f. taimyrensis* from the Yenesai, is scarcely a fair test, though even here the difference is apparent, though slight. Neumann apparently had four specimens of *L. f. taimyrensis* and two of *L. f. antelius*, also the type and co-type of *L. heuglini*. He compared *L. heuglini* with *L. f. antelius*, and found that they were nearer *L. f. taimyrensis* than *L. f. antelius*.

But since Neumann wrote, in 1934, Stegmann has described *L. f. ponticus* and revived *L. f. mongolicus*.

L. f. mongolicus comes to Iraq in winter, *L. f. antelius* to Aden and Somaliland, *L. f. taimyrensis* to Iraq, Aden, and Somaliland, so it may be that all three winter on the north-east coast of Africa. Which is *L. heuglini* ?

Until that is decided without a shadow of doubt let us retain the familiar *L. f. taimyrensis* and not disinter *L. heuglini*. My point is, that to discard an old-established name for an obscure, though older, one is nothing but mischievous unless the facts are beyond dispute.

A further point in Mackworth-Praed and Grant's note is that they claim that the *L. fuscus* and *L. argentatus* groups are separable on structure, quoting as their evidence Dr. Lowe's remarks on the subject in 1913. But Dr. Lowe was dealing only with British birds, pointing out structural differences between *Larus argentatus* and *Larus fuscus* as they occur in the British Islands. If Mackworth-Praed and Grant would study the whole group which Stegmann had before him when he wrote his paper, and of which I have representatives of all forms in my collection, I think they would agree that structural evidence breaks down when the Asiatic forms are examined.

And, moreover, the statement that " too many races have been described," after examining the series in the British Museum, where almost all specimens are from winter quarters, and some forms scarcely represented at all, is scarcely just to Stegmann, who worked for weeks with huge series, all from breeding quarters.

Dr. Percy R. Lowe, by way of reply to Colonel Meinertzhagen's remarks, asked leave to exhibit three Gulls from the British Museum collection. One of these was an example of *Larus fuscus britannicus*, while the other two were the forms known as *L. f. taimyrensis* and *L. f. antelius*. All three were adult males in summer plumage, and it might be said, therefore, that they represented, geographically, Western European and Siberian forms.

Dr. Lowe regretted to say that ever since his discovery

that two distinct races of the Lesser Black-backed Gull were found in the British Isles (' British Birds,' June 1, 1912, p. 2) he had not followed very attentively the nomenclatural adventures of *Larus fuscus britannicus* or of other recently-named subspecific forms; but he could not help feeling interested in Professor Stegman's revolutionary views as regards the conspecific nature of the Herring-Gull (*Larus argentatus*) and the Lesser Black-backed Gull (*Larus fuscus*), or in Colonel Meinertzhagen's remarks on the subject that evening and at the last meeting of the Club.

Colonel Meinertzhagen had said that his (Dr. Lowe's) description of the structural differences of the Herring-Gull and Lesser Black-backed Gull in a popular book entitled ' Our Common Sea Birds ' (p. 174) might be all very well so long as it was confined to Gulls breeding in the British Isles, but that when one came to range farther afield—farther east into Siberia for example—the case was different, as there one found all sorts of intermediate structural differences, which rendered it impossible to distinguish the two forms as specific entities.

Dr. Lowe thought that these conclusions of Colonel Meinertzhagen and Professor Stegman had been based on a misapprehension of facts. The three specimens, for instance, which he exhibited clearly showed that there were just the same obvious structural differences between *Larus fuscus britannicus* and the forms known as *L. f. taimyrensis* and *L. f. antelius* as existed between *Larus fuscus britannicus* and *Larus argentatus argentatus*. And this was not surprising, for when, at the invitation of Captain Claude Grant, he had examined *L. f. taimyrensis* and *L. f. antelius* he found, to his astonishment, that these two forms had no sort of claim to be included in the category of Lesser Black-backed Gulls, but were Herring-Gulls, although dark-backed Herring-Gulls.

This conclusion was, it seemed to him, inevitable if the usual structural characters which differentiate the Lesser Black-backed Gull from the Herring-Gull were employed and the colour of the mantle and soft parts ignored or relegated to a subsidiary position. It seemed, therefore, to him, that one had only to recognize the obvious differences in form between

these two Gulls, to say nothing of their habits, to be forced to the conclusion that Professor Stegman's view was not tenable.

To the above remarks I should now like to add that on the following day Captain Claude Grant and I examined specimens of *L. a. argentatus*, *atlantis*, *vegæ*, *antelius*, *michahellesii*, *cachinnans*, *mongolicus*, *taimyrensis*, and *ponticus*, and found that, submitted to the same test, all were, in our opinion, Herring-Gulls.

The Rev. F. C. R. Jourdain made the following remarks :—

In the last number of the 'Bulletin' (*antea*, pp. 29–32) Mr. Bunyard gives a description of how he put eleven Cuckoos' eggs into Reed-Warblers' nests, and, because they were not rejected, claims that these experiments, "as far as they go, are conclusive evidence against the theory of assimilation being the result of elimination by selection."

To say nothing of the fact that the non-rejection of the "mixed" type of Cuckoo's egg which has been gradually evolved for the very purpose does not disprove the assimilation theory, but rather supports it, Mr. Bunyard seems to be unaware that for over a hundred years past complete and scientifically conducted experiments on this point have been carried out by Lottinger (1775–1795) and subsequently by Swynnerton and Rensch. Swynnerton's experiments were over fifty in number, and he found that ill-matched substitutes were rejected in about 80 per cent. of cases. In many cases the parents removed the intruding egg in their bills. Dr. Bernhard Rensch repeated in Europe the experiments of Swynnerton in Africa, and achieved similar results. Thirty-eight of these experiments are described in the Journ. f. Ornith. 1924, pp. 461–472. As in these cases the eggs were inserted by the experimenters it is not possible to ascribe their disappearance from the nest to carelessness on the part of the depositor, as Mr. Bunyard does with regard to the Cuckoo.

Mr. Bunyard also states that "almost perfect assimilation" is found in the Great Spotted Cuckoo's eggs, which are laid in the nests of various species of Corvidæ (Raven, Hooded

Crow, Magpie, etc.). As the eggs of this Cuckoo are very uniform in type, I should like to ask how it is possible for them to assimilate closely to eggs which differ so widely as those of Raven, Magpie, and Hooded Crow—both in size and markings. In Egypt there are no Magpies, and all the eggs are laid in Hooded Crows' nests.

The theory that the variation in the colour of Cuckoos' eggs was due to the food provided by the fosterers was excusable in 1853, when Baldamus (not Rey, as Bunyard states) brought it forward. Now when we know that the food of the adult Cuckoo consists largely of species rejected by other birds, such as the hairy caterpillars, whose hairs line their gizzards, it is untenable. I am unable to agree with the assumption that a character acquired through food in childhood in this remarkable way (and presumably retained through life) can be transmitted by heredity (p. 31).

As to the use of feathers in Reed-Warblers' nests, I need only state that both Stevenson in the 'Birds of Norfolk' and Howard Saunders have recorded instances of their use.

Mr. C. F. M. Swynnerton made some remarks on his paper in 'The Ibis.'

Mr. H. A. Gilbert exhibited some flash-light photographs taken by Mr. Arthur Brook of Curlew on moorland and in quarries on the seashore in Radnorshire.

Mr. E. G. Bird sent the description of two new subspecies from the Outer Hebrides :—

Emberiza schœniclus mackenziei, subsp. nov.

Description.—Male similar to *E. s. schœniclus* Linnæus (Syst. Nat. ed. x. 1752, p. 182 : Sweden), but possibly slightly richer on the back and shoulders. Female is decidedly darker on the back than the female *E. s. schœniclus*. This darkness is chiefly due to a decidedly richer tint of the cinnamon edging to the feathers. The streaks on the underparts in the female are somewhat heavier.

Distribution.—South Uist, Outer Hebrides.

Type.—Ad. ♀, South Lochboisdale, South Uist, Outer Hebrides, April 6, 1935 (in my collection).

Remarks.—Eight specimens of this bird taken in March and April from South Uist were examined by me. It is named after Mr. Finlay Mackenzie, of Lochboisdale, whose kindness made my collection possible.

Anthus spinoletta meinertzhageni, subsp. nov.

Description.—As compared with both *A. s. petrosus* Montagu (Trans. Linn. Soc. iv. 1798, p. 41 : Wales) and *A. s. kleinschmidti* Hartert (Vög. pal. Faun. Band 1, 1903–10, p. 284 : Faroe Islands) the new subspecies is darker both above and below. The upper parts are definitely darker and of a dark grey olive tinge as compared with a much more brown olive tinge in both *A. s. petrosus* and *A. s. kleinschmidti*. The streaks on the underparts are much darker than in either of the other subspecies, while the yellow tinge on the underparts, fairly pronounced in both the other subspecies, is almost absent from the new subspecies.

Distribution.—South Uist, Outer Hebrides. In passing, it should be noted that some Rock-Pipits from Skye in the British Museum collection appear to be also of this subspecies.

Type.—Ad. ♂, Lochboisdale, South Uist, Outer Hebrides, April 5, 1935 (in my collection).

Remarks.—Seven specimens taken in March and April from South Uist were examined by me. It is named after Col. R. Meinertzhagen, to whom I am much indebted for the loan of some specimens of the Faroese subspecies *A. s. kleinschmidti*. It will be remembered that Col. Meinertzhagen first noticed that the Hebridean bird might be a new subspecies (Ibis, Jan. 1934, p. 56).

Mr. C. G. Bird sent the following note on Crested Larks from the Near East :—

In south Asia Minor this year we collected two subspecies of Crested Larks, a dark form from the plain around Adana and a paler, more sandy form from the hills around Gaziantep. It has been somewhat difficult to name these birds owing to the great number of subspecies that have been described on

very small differences; it has also been necessary to examine material from over a very wide area.

All the specimens of Crested Larks in the British Museum have been examined, and I am indebted to Col. Meinertzhagen for being able to see the large series in his own collection and to Dr. C. B. Ticehurst for examining my birds and sending some notes on them.

In all cases specimens have been examined from the type-locality or, where this has not been possible, the nearest place to it. Our series of eleven birds from Gaziantep was compared with *Galerida cristata subtaurica* from Eregli (type-locality); they were not to be distinguished from them. Unfortunately I was not able to compare them with *G. c. weigoldi* from Urfa, but Gaziantep is quite near to this town, in the same type of country. Birds from the south of Urfa in Iraq are quite indistinguishable from the Gaziantep specimens. It is, therefore, reasonable to regard *G. c. subtaurica* as synonymous with *G. c. weigoldi*. Gaziantep is mid-way between Eregli and Urfa. Further, these two subspecies were compared with *G. c. brachyura* from El Ghor, south of the Dead Sea. Although I have not seen specimens from the actual type-locality given by Tristram, I have seen specimens from within ten miles of it, and when they are compared with the Gaziantep birds, *G. c. subtaurica*, and birds from the south of Urfa, i. e. *G. c. weigoldi*, they were all found to be the same, therefore *G. c. subtaurica* and *G. c. weigoldi* are synonymous with *G. c. brachyura*.

It is with some hesitation that I place *G. c. magna* as distinct from *G. c. brachyura*, but if specimens of each are taken from the type-localities, *G. c. magna* may be seen to be slightly paler than *G. c. brachyura*; the latter is also a little smaller, but overlap is considerable. Specimens of *G. c. magna* have been examined from the type-locality, Yarkand, Persia, and Arabia.

In the Judæan highlands *G. c. zion* occurs; it is darker than *G. c. brachyura* and, as in some other birds in the south of its range, it is found on high ground; the further north one goes the lower it is found; in this case at the north of its range it is found at sea-level on the plain around Adana, where we collected seven specimens. *G. c. zion* is not found north of the

Taurus nor to the east of the Giaour Dagh. The large series of this subspecies in Col. Meinertzhagen's collection has been examined from the type-locality and Syria.

On Mt. Carmel and the north Palestine coast quite a distinct subspecies occurs, *G. c. cinnamomina*; it is, as the name implies, considerably more cinnamon in colour than *G. c. brachyura*.

G. c. ioniæ has been described from east Asia Minor, type-locality Priene. Specimens have not been examined from this area, but it has been shown by Laubmann (Orn. Jahrb. 1915, pp. 25 & 26) that it is synonymous with *G. c. caucasica*. It is probable that *G. c. ankaræ*, which has been described from Ankara, which is between Priene and the Caucasus, will be found to be synonymous with *G. c. caucasica*.

Following is the summary of the subspecies, with their distribution :—

Galerida cristata brachyura Tristram, P. Z. S. Lond. 1864, p. 435 : El Ghor.

Galerida cristata weigoldi Kollibay, Orn. Montasb. 1912, p. 27 : Eregli.

Galerida cristata subtaurica Kollibay, *op. cit.* 1912, pp. 26 & 27 : Urfa.

Distribution.—South Asia Minor (vilayets of Gaziantep, Urfa, and Mardin), Iraq, Transjordania, lowlands of South Palestine, Sinai district, and possibly the deserts of North Egypt.

Galerida cristata magna Hume, Ibis, 1871, p. 407 : Yarkand.

Distribution.—Yarkand, North India, Afghanistan, Persia, North and Central Arabia.

Galerida cristata zion Meinertzhagen, Bull. B. O. C. 1920–21, p. 21 : Jerusalem.

Distribution.—Judæan highlands, through Palestine (not coasts), to Syria and the plain around Adana, south Asia Minor.

Galerida cristata cinnamomina Hartert, Vög. pal. Faun. Bd. 1, 1903–10, p. 235 : Mt. Carmel.

Distribution.—Mt. Carmel and North Palestine coast.

Galerida cristata caucasica Taczanowski, Bull. Soc. Zool. de France, 1887, p. 621 : Lagodechi in the Caucasus Mts.

Galerida cristata ioniæ Kollibay, Orn. Monatsb. 1912, p. 26 : Priene.

(? *Galerida cristata ankaræ* Kümmerlowe & Niethammer, Journ. f. Ornith. 1934, pp. 540 & 541 : Ankara.)

Distribution.—Caucasus Mts., extending along the north coast of Asia Minor to the west coast (Priene) ; possibly, also, the Anatolian plateau and east Asia Minor.

Capt. Claude Grant and Mr. C. W. Mackworth-Praed sent the following note on the type-locality of *Sarothrura lineata* (Swainson, Anim. Menag. p. 339, 1838). :—

Sclater, Syst. Av. Æthiop. i. p. 106, 1924, gives South Africa only, and we cannot find that a more definite type-locality has been fixed.

The earliest references to this Crake are :—

1837. Swainson, Class. Bds. ii. p. 358, 1837 : *nom. nud.* Description of genus *Alecthelia*, giving *A. lineata* as type of genus.

1838. Swainson, Anim. Menag. p. 339, 1838 : South Africa.

1839. Smith, Ill. Zool. S. Afr., Aves, pl. xxi. and text, 1839, mentions having procured a specimen, from which the plate was drawn, but gives no locality, and the specimen must have been eventually lost. This author's reference to Proc. S. A. Inst. Nov. 1828 must be to an MS. note, as we cannot find that this journal was published prior to 1830.

1846. Gray, Gen. Bds. iii. p. 595, no. 29, 1846 : no locality.

1852. Reichenbach, Handb. Fulic. t. cxxv. fig. 1224, 1851 : text, p. xxiii. 1850, published 1852 : no locality.

1856. Bonaparte, Comp. Rend. xliii. p. 599, no. 380, 1856 : no locality.

1865. Schlegel, Mus. Pays-Bas, v. Ralli, p. 27, 1865 : South Africa.

1867. Layard, Bds. S. Afr. p. 339, 1867 : Knysna.

Thus Layard is the first author to give a definite locality for this species, and we can, therefore, fix the

type-locality of *Sarothrura lineata* (Swainson) as Knysna, Cape Province, South Africa.

Layard states that Swainson's type is at Cambridge, but recent enquiries show that it cannot now be found.

Mr. Gregory M. Mathews sent the following description of a new subspecies of the Kermadec Petrel :—

Pterodroma neglecta juana, subsp. nov.

Description.—Differs from typical *P. n. neglecta* in being darker and in never having the light phase. This new form is black above and below, not brown above with the under-surface lighter ; it is also larger.

Distribution.—Juan Fernandez Group, where it breeds.

Type.—In the Stockholm Museum, Sweden. An adult male taken on January 21, 1917, on Masatierra in the Juan Fernandez Group.

Measurements.—Average wing-measurement 303·5 mm., against 292 mm. of the typical form from the Kermadec Islands.

NOTICES.

The next Meeting of the Club will be held on Wednesday, January 8, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

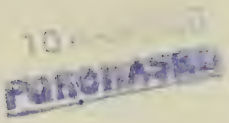
Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor,

Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

Dr. P. H. Manson-Bahr: "The Display of certain Species of Birds of Paradise," illustrated by paintings made in the Zoological Gardens.

Mr. P. F. Bunyard: Exhibition of, and remarks on, interesting eggs.



Bird Room

14 FEB 1936
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXCII.

The three-hundred-and-eighty-seventh Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, January 8, 1936.

Chairman : Mr. D. A. Bannerman.

Members present :—E. C. Stuart Baker; Miss P. Barclay-Smith; Mrs. R. G. Barnes; Brig.-Gen. R. M. Betham; P. F. Bunyard; Hon. G. L. Charteris; H. P. O. Cleave; R. H. Deane; A. Ezra; Miss J. M. Ferrier; Capt. C. H. B. Grant (*Editor*); Col. A. E. Hamerton; B. G. Harrison; Dr. J. M. Harrison; Mrs. T. E. Hodgkin; P. A. D. Hollom; Lieut.-Commdr. A. M. Hughes; Major H. P. W. Hutson; Dr. K. Jordan; Rev. F. C. R. Jourdain; Dr. N. H. Joy; N. B. Kinnear; Miss E. P. Leach; Miss C. Longfield; Dr. G. Carmichael Low; C. W. Mackworth-Praed (*Hon. Treas.*); J. H. McNeile; Dr. P. H. Manson-Bahr; C. Oldham; H. J. R. Pease; H. Leyborne Popham; Miss G. M. Rhodes; W. L. Sclater; D. Seth-Smith; Miss D. L. Taylor; Dr. A. Landsborough Thomson (*Hon. Sec.*); B. W. Tucker; Miss E. L. Turner; H. M. Wallis; Mrs. H. W. Boyd Watt; H. F. Witherby; C. G. M. de Worms.

Guests :—Miss M. Barclay; R. Bellemy; Fl.-Lieut. B. H. Godfrey; J. L. Hawkins; Mrs. Hughes; Dr. C. Manson-Bahr; Mrs. Leyborne Popham; Miss D. Steinthal.

Mr. D. A. Bannerman exhibited an example of the Black-shouldered Nightjar (*Caprimulgus nigriscapularis*) which had been obtained at Mambolo, in the Port Loko district of Sierra Leone, on February 16, 1935, by Mr. R. R. Glanville, who had recently presented an interesting collection of birds to the British Museum. This species (said Mr. Bannerman) is very rare in West Africa, having but once been recorded—from Portuguese Guinea. It was described from west of Lake Albert.

Among the collection the following species were recorded from Sierra Leone for the first time, in addition to the Nightjar mentioned above :—

Pelecanus rufescens. Kichom, Port Loko district, 18. ii. 35. Noted as common.

Macronyx croceus croceus. Bali, Port Loko district, 19. ii. 35. Noted as common.

Stephanoaëtus coronatus. Kamakwi, Karene district, 10. i. 35. Noted to be rare.

Mr. Glanville, who is in the Agricultural Department, has just returned to the West Coast, and will continue his studies of the birds of the three most westerly districts of the Sierra Leone Protectorate—Port Loko, Karene, and Bombali—from which we had previously very little information. He will, I am sure, make good use of his opportunities while stationed in the neighbourhood of the Skarsies River.

Mr. Glanville's collection contains specimens of that beautiful Emerald Starling (*Coccycolius iris*) from Yana, in the north of the Karene district, which was formerly so extremely rare in collections, besides a number of other interesting forms.

Mr. Bannerman further said that he had that very morning received a skin of a male Wigeon from Ibadan, Nigeria, shot on December 18, 1935, and forwarded to the British Museum by Mr. W. A. Fairbairn, of the Forestry Service. This is only the second record of a Wigeon from West Africa. The first record was published in Bull. B. O. C. lv. 1935, p. 170.

Mr. Fairbairn writes that it is an extraordinary thing to find this duck on the railway reservoir in the forestry plantation

at Ibadan, for he had never seen duck of any description on this reservoir at any time before. In Mr. Fairbairn's opinion this bird is unlikely to have come from the north of Nigeria, and is more likely to have reached Ibadan *via* the coast. It is, at any rate, a very interesting occurrence, which strengthens my belief that all migratory European ducks will eventually be recorded from Nigeria.

Dr. P. H. Manson-Bahr exhibited some tempera-paintings of Birds of Paradise which he had made, and made the following remarks on the display of some of the species :—

Not by any means the least interesting feature of this gorgeously apparelled genus of birds is the fantastic use to which they put their highly coloured plumes in order to display them in all their iridescence to the best advantage. In order to give effect to their plumes, which have been developed in various odd and unusual parts of the body, the birds have come to adopt stances in which they resemble insects and butterflies more than their own avian selves. Moreover, the positions assumed by members of different genera are quite dissimilar, so that one may assume that the development of these extravagant plumes has but one object, namely, sexual display. There is no doubt that this is a sexual act performed for the benefit of the soberly clad female, although in captivity these displays are undertaken apparently solely from a kind of self-satisfying pride.

It is probable, too, that these displays can only be seen, and certainly only accurately studied, in captive birds. When performed in the dense and leafy jungles of their native haunts the magnificance of the full display must be obscured by the abundant foliage. In some species the display is almost momentary, so rapidly is the expansion and retraction of the main plumes performed, and, moreover, it is only at certain times of the day that the bird feels itself inclined in this direction, and this more usually takes place in the earlier hours of the morning, when the general public is absent from the Zoological Gardens. It is well known that in the tropical bird house at the London Zoological Gardens there is nearly always

at this time of the year abundant material for studies of this kind. As Mr. Seth-Smith has already explained in the 'Proceedings of the Zoological Society of London,' September 1923, attempts which have been made to photograph or cinematograph this fascinating performance have failed on account of the bright light employed and the racket and fuss necessary.

Although this is such an interesting phenomenon of natural adaptation, singularly few studies on it, and fewer actual paintings, appear to have been made. As already explained, this is probably due to the fact that these birds usually perform their dance early in the morning, and it is very quickly over. Therefore, in order to make accurate paintings many studies have to be undertaken and very rapidly performed.

In the literature there are several descriptions by eminent ornithologists, all of which have been made from captive birds in zoological gardens. Thus, in 'The Ibis' (1905, pp. 429–440), W. R. Ogilvie-Grant has described the display of the lesser bird (*Paradisea minor*), with figures by G. E. Lodge. In this species the display took place between 8 and 9 o'clock in the morning, especially on dull mornings followed by periods of bright sunshine. The first two displays are generally the longest, and last from four to nine minutes, but they generally decrease in duration as the bird becomes exhausted. In this species the display is preceded by loud cries, and soon the side-plumes are erected to form an arched cascade over the back, meeting one another in the middle lines and completely hiding the depressed tail when the bird is viewed from behind. In this attitude the bird remains from ten to twenty seconds, slightly quivering its wings, when suddenly he appears to go quite mad and commences to dance and hop wildly backwards and forwards with head bent down, wings extended horizontally, and side-plumes erected to their utmost. The displays of the greater bird (*P. apoda*) and the closely-allied members of this genus appear to be very similar.

Again in 'The Ibis' (1907, pp. 225–229), the late Sir Wm. Ingram described a totally different performance in the case

of the King Bird of Paradise (*Cicinnurus regius*), and up to that time it had never been seen or described by any competent witness. The display commenced in August, and was preceded by the giving forth of several short, separate notes and squeaks, resembling the whine of a pet dog. Next the wings were spread out, meeting the head, the bird giving out a chanting, wailing song somewhat like a Sky-Lark. The fan-like side-plumes are expanded and the short tail pressed close over the back, so as to throw the long tail-wires over the head, gently swinging the body from side to side. The spiral tips of the wires look like small balls of burnished metal. The paper is illustrated by an excellent coloured plate and black and white drawings made by Mr. G. E. Lodge. In the 'Bulletin of the New York Zoological Society,' 1921, pp. 111–113, L. S. Crandall has figured and described the totally different display of the Blue Bird of Paradise (*Paradisornis rudolphi*). In this species the almost unbelievably beautiful iridescent plumes are ventrally situated. These are mostly bright blue and light green in colour, whilst the side-plumes are fawn and brown. In the fully developed plumage there are two central wires slightly incurved, of a foot or more in length, each bearing on its tip a spatula of brilliant blue. As is well known, this beautiful bird displays in the upside-down position, so as to show off its magnificence to the best advantage. So astounding and unexpected is this performance that the keeper in the New York Zoo, on first observing it, thought that the bird was undergoing convulsions, and wished to remove it to the sanatorium for treatment !! The exaggerated position as figured in the plate in the article quoted has not been observed in the case of this bird in the London Zoological Gardens, probably because the present specimen has not yet assumed the fullness of its gorgeous plumage. In the specimen at present in the Zoological Gardens, which now has almost attained full plumage, the terminal wire-like tail has not yet been produced. This bird performed continuously last winter in the inverted position, swaying from side to side, the eyelids usually half closed, and the left wing extended so as to partially conceal the head, whilst the eyes peeped coyly behind. The

breast-feathers are puffed out so as to show their iridescence to the best advantage, and the beautiful ventral plumes, with their edging of dull scarlet, are spread fan-wise behind. The throat is puffed out, and all the time, whilst swaying, the bird gives utterance to a continuous gurgling, like some mechanical clock-like machine. The whole performance may be kept up for several minutes continuously. In the 'Proceedings of the Zoological Society of London,' September 1923, pp. 609–613, Mr. Seth-Smith has given a most excellent description of an entirely different performance by the Magnificent Bird of Paradise (*Diphyllodes magnificus hunsteini*), with four excellent text-figures, again by Mr. G. E. Lodge. This was described by Seth-Smith at a meeting of the Zoological Society on February 20, 1923. At that time a male bird in full plumage was in full display in the tropical bird house, and a series of coloured drawings was made at that time and presented to the Zoological Society by myself. As in the case of most of these birds, three or four attitudes are adopted, which follow on one another in regular sequence, though frequently the final and full attitude is assumed without the others. When inclined to display, the bird sits on the perch with the plumage rather relaxed, utters two or three sounds, and then suddenly adopts an attitude with the pectoral shield expanded in an expectant attitude, as shown in one of the figures. In the full display, or in what Seth-Smith calls the fourth stage, the head is thrown back and the body brought into an erect position, with the nuchal hood of pale yellow feathers flashed (like a Geisha holding a Japanese fan) into prominence over the head. At the same time the pectoral shield is lowered to form a broad ribbon-like strip of bright green, down the centre of which, like a zip-fastener, appears a narrow band of iridescent feathers of emerald-green or brilliant blue, according to the angle of light at which it is viewed; whilst at the lower extremity of the shield appears a narrow bordering of the same iridescent hue. The bird is standing absolutely upright, and the beak is opened widely to show the pale sap-green colour of the interior lining. The whole performance lasts only three to four seconds, and may be undertaken at

intervals of half an hour, and usually on dull grey mornings in February and March.

The last species I have studied in display, and which I believe has not been previously figured, is the Lesser Superb Bird of Paradise (*Lophorhina superba minor*), of which the Zoological Society had a fine example in full display in 1928. This was the best bird of the kind that had been exhibited in London, as other specimens since that time have never developed this power to the same degree. This bird, which is about the size of a Missel-Thrush, is of a beautiful velvety black colour, with a bright steel-green iridescent breast-shield which, in the ordinary position, appears to be suspended from the breast by some invisible elastic thread. The bird is provided with long velvety and scalloped nuchal plumes which, in the sitting position, are held close to the body and are not conspicuous. The crown is covered with short but erectile green and iridescent plumes which, when erected, form two lateral horns. The display of this bird is as startling as it is peculiar. There is no preliminary vocal performance, and the bird remains almost silent throughout. There are also no preliminary stages, as in the other species already described, and the display is spontaneous and instantaneous. Suddenly the bird assumes a squatting position and the nuchal plumes are spread out to form a veritable fan, like some giant Camberwell Beauty butterfly. The ventral shield is spread out to form a lower iridescent and highly scintillating lower border to the fan. In the centre of this pitch-black mass the head can be made out by two iridescent points, like some shining emeralds upon an ebony background, and the beak is held widely gaping open to show the striking bright green interior. At the same time the bird moves fan-wise, swaying from side to side, and uttering a slight hissing sound. The uninitiated, viewing the performance for the first time, could hardly be blamed for not recognizing the dark object before him as a bird at all. After remaining in this extended and undoubtedly uncomfortable position for some three to four seconds, the fan suddenly closes up, and the apparition becomes a normal bird once more. The

particular specimen under consideration would perform some mornings about once every ten minutes, and could be induced to do so by dangling some bright object, such as a watch-chain or ring, in front of his cage, a performance whch seemed to mesmerize him.

As has already been remarked, he performed best in the early hours of the morning, when not disturbed by too frequent visitors ; but when hungry, or when his platter had been filled with a fresh supply of grapes which attracted his attention, he refused to perform at all.

No doubt further opportunities will present themselves for completing the study of this fascinating subject.

Mr. D. Seth-Smith remarked that it was practically impossible to photograph the display of the Birds of Paradise owing to their strong dislike of sunlight.

The Rev. F. C. R. Jourdain exhibited a skin of an immature female of the White-breasted Sea-Eagle, *Cuncuma leucogaster* (Gmelin.), which was obtained in the eastern Solomon Islands on May 29, 1934. The head was almost white, except for a few dark streaked feathers on the crown, but the underparts were still brown. The tail, however, had no white on it except just at the tips of some of the feathers. In the British Museum series there are a good many immature birds, some of which have not yet attained the white head, and yet all have white tails, or white with some brown markings, except the only specimen from the Solomons, which also has a brown tail. It seems remarkable that the only birds from this locality should both show this peculiarity.

Mr. P. F. Bunyard exhibited the following eggs, mostly from the collection of the late Mr. Chas. F. Stedman, of Ashford, Kent :—

A clutch of nine (originally ten) Blackbird's (*Turdus m. merula*) taken near Ashford, Kent, on June 12, 1921. The nest was placed in a straw-stack and was deserted, although the eggs were quite fresh. Clutches of seven have been

twice recorded. All eggs are slightly marked with fine hair lines, proving conclusively they are the product of the same bird.

A clutch of six leucitic eggs of the British Robin (*Erithacus rubecula melophilus*), found at Ashford on May 30, 1912. Very large eggs, tinged greenish-blue. Two are slightly marked.

	Measurements. mm.	Weights. mg.
	21 ×18	184
	22 ×18	204
	21·3 ×18	192
	21·4 ×17·8	197
	21 ×18	185
	20·3 ×17·2	174
Rey's average (55 eggs).	19·44×14·77	133

A clutch of five British Robin's, taken near Ashford on May 16, 1925, by a boy, and end blown. Nest on ground, a typical Robin's. These are remarkable eggs with pale bluish ground, sparingly marked at large ends pale reddish-brown. They resemble certain forms of the Snow-Bunting (*Plectrophenax nivalis*).

A clutch of five leucitic eggs of the House-Sparrow (*Passer d. domesticus*) taken by Stedman and Bunyard at Ashford on May 23, 1890, from a tall conifer. Exceedingly large eggs, almost unmarked. Judging by weights and measurements, these are obviously deficient in shell-forming matter.

	Measurements. mm.	Weights. mg.
	24·5×16	180
	25·5×17	217
	25 ×16·5	209
	24 ×16·4	211
	25 ×17	213
Rey's average (100 eggs).	22 ×15·6	207

A clutch of five House-Sparrow's, taken by Stedman and Bunyard near Ashford on June 7, 1925. Exceptionally beautiful eggs, resembling certain forms of those of the Great Reed-Warbler (*Acrocephalus a. arundinaceus*). The nest was placed in a tall pear tree in an orchard.

A clutch of three Whitethroat's (*Sylvia c. communis*) from Hants, found by Stedman and Bunyard. Birds carefully identified. Eggs exceedingly small, otherwise perfect ; richly marked at large ends.

	Measurements. mm.	Weights. mg.
	16 ×12	77
	16·2×11·8	75
	16 ×11·5	72
Rey's average (100 eggs).	18·1×13·8	114

A clutch of five Corn-Bunting's (*Emberiza c. calandra*), taken in Kent by Stedman about 1929. A very rare form, finely stippled. The typical *Emberiza* vein-markings are almost absent ; in size considerably above the average.

A clutch of six Corn-Bunting's, from Essex. These were fairly typical of the greyish ground form, capped with zones of rich brownish-black ; an exceptionally even clutch for this species. Clutches of six are rare in this country. They have been recorded from Sussex ; apparently they are rare in Cornwall. Among the 138 nests examined by Colonel Ryves only one six is recorded.

Typical clutches were also exhibited for comparison with the above.

Mr. B. G. Harrison gave a short account of a trip to Uruguay in 1935, and made some remarks on the birds he observed, with special reference to Cowbirds.

Mr. N. B. Kinnear sent the following description of a new race of Nuthatch :—

Sitta castanea tonkinensis, subsp nov.

Description.—The male differs from *S. castanea cinnamoventris* in the larger wing and the slightly darker colour above. The head is the same colour as the back and not paler ; the feathers of the cheeks have narrow black tips with a greater extent of black on the basal portion, whereas in the typical form the cheeks appear pure white and the black of the basal portion is very much reduced. Underside paler, basal portion of the under tail-coverts black instead of grey, with very little chestnut on the white tips ; basal portion of the feathers on the thighs also much darker. Female larger, but otherwise does not differ from *S. c. cinnamoventris.*

Distribution.—Tonkin and Laos in Indo-China.

Type.—Male, January 28, 1928 ; Napé, Laos, Indo-China. Collected by J. Delacour and W. P. Lowe. Brit. Mus. Reg. no. 1928.6.26.1538.

Measurements.—Three males, wing 87–88·9 mm. ; bill from skull 23–23·5 mm. Two females, wing 84–85 mm. ; bill from skull 21 mm.

Two males in the Paris Museum measured by J. Delacour have wings 90 and 91 mm.

Eleven males, *S. c. cinnamoventris*, wing 79–84·5 mm. ; bill from skull 21–22·5 mm. Six females, wing 80·5–82 mm. ; bill from skull 21–21·5 mm.

Remarks.—Material examined, one specimen from Napé, Laos, in the British Museum, one male and two females from Laos, and a male from Tonkin in the Field Museum, Chicago, for the loan of which I am indebted to the authorities of the Field Museum of Natural History.

Mr. C. W. Benson sent the following description of a new race of Wren-Warbler :—

Calamonastes simplex neglectus, subsp. nov.

Description.—Differs from *C. simplex simplex* (Cabanis) and *C. s. undosus* (Reichenow) in having the upper-side reddish-brown, not greyish-brown. In its pattern of barring on the underside and dusky appearance of feathers on chin and throat

this bird is clearly a race of *C. simplex*, and not *C. fasciolatus*, to which latter species, however, the colouring of the upper-side is rather similar.

Type.—In the British Museum. Male, 5 miles east of Fort Hill, N.W. Nyasaland, 4300 feet, August 17, 1935. Collected by C. W. Benson. Brit. Mus. reg. no. 1935.9.1.4.

Measurements.—Wing 67, tail 55, culmen 15, tarsus 23 mm.

Remarks.—The type was the only example collected. This was in open woodland of the Brachystegia-Msuku type, where on the following day (Aug. 18, 1935), not more than 300 yards away, an example of *Calamonastes fasciolatus stierlingi* was secured (now also in the National Collection, Brit. Mus. reg. no. 1925.10.9.1.) It is unfortunate that a larger series of these Wren-Warblers was not collected in this locality, but these two specimens show that in this locality in Northern Nyasaland the ranges of the two species, *Calamonastes fasciolatus* and *C. simplex*, overlap near the northernmost and southernmost limits respectively of their ranges.

I am much indebted to Mr. N. B. Kinnear and Capt. C. H. B. Grant, who have examined these two birds, and are in agreement with these conclusions.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following note on the type-localities of *Cursorius cursor somalensis* Shelley (Ibis, 1885, p. 415) and *Rhinoptilus africanus hartingi* Sharpe (Bull. B. O. C. iii. 1893, p. xiv) :—

Shelley gives Somaliland and also the area within which this bird was collected. Sharpe gives Somaliland only. The types are in the British Museum, and were collected by Lort-Phillips on his trip from Berbera to the Upper Webi Shebeli. James gives a map in the Journ. Roy. Geogr. Soc. 1885. Through the kindness of Miss Eva Godman we have obtained from Mr. E. Lort-Phillips, under date July 18, 1935, the exact places at which he shot these two birds, viz. :—

Cursorius cursor somalensis Shelley : Sogsoda Plain, British Somaliland.

Rhinoptilus africanus hartingi Sharpe: Gedais, Sogsoda Plain, British Somaliland.

These places are, therefore, the correct type-localities of these two races.

NOTICES.

The next Meeting of the Club will be held on Wednesday, February 12, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

Dr. G. Carmichael Low will give a short description of his recent tour round the world with the British Medical Association, and an account of the more interesting birds observed.

Mr. B. G. Harrison will make some remarks on the Cowbirds of Uruguay.

Mr. H. M. Wallis will read an extract from a letter on Moroccan birds received from Miss R. Cooper of Fez.

Mr. B. W. Tucker will describe his spring trip to Southern Spain.

The Rev. F. C. R. Jourdain will make some remarks on an error in La Touche's 'Birds of Eastern China.'

MAR 1936
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

BRITISH MUSEUM NATURAL HISTORY

No. CCCXCIII.

The three-hundred-and-eighty-eighth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, February 12, 1936.

Chairman : Mr. G. M. Mathews.

Members present :—Miss C. M. Acland ; W. B. Alexander ; E. C. Stuart Baker ; D. A. Bannerman ; Miss P. Barclay-Smith ; Mrs. R. G. Barnes ; F. J. F. Barrington ; P. F. Bunyard ; Hon. G. L. Charteris ; Maj.-Gen. Sir P. Z. Cox ; A. Ezra ; Miss J. M. Ferrier ; Capt. C. H. B. Grant (*Editor*) ; B. G. Harrison ; Dr. J. M. Harrison ; R. E. Heath ; Mrs. T. E. Hodgkin ; P. A. D. Hollom ; Lieut.-Commdr. A. M. Hughes ; Major H. P. W. Hutson ; Rev. F. C. R. Jourdain ; Dr. N. H. Joy ; N. B. Kinnear ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low ; Dr. N. S. Lucas ; Rear-Admiral H. Lynes ; J. D. Macdonald ; C. W. Mackworth-Praed (*Hon. Treas.*) ; J. H. McNeile ; Dr. P. H. Manson-Bahr ; T. H. Newman ; E. M. Nicholson ; C. Oldham ; B. B. Osmaston ; H. J. R. Pease ; H. Leyborne Popham ; Miss G. M. Rhodes ; W. L. Sclater ; D. Seth-Smith ; Major M. H. Simmonds ; Major A. G. L. Sladen ; Marquess of Tavistock ; Dr. A. Landsborough Thomson (*Hon. Sec.*) ; B. W. Tucker ; Miss E. L. Turner ; H. M. Wallis ; Mrs. H. W. Boyd Watt ; C. M. N. White ; H. F. Witherby ; C. G. M. de Worms.

Guests :—Miss B. A. Carter; W. M. M. Chapman; Mr. and Mrs. Eastham Guild ; A. A. Havers ; J. L. Hawkins ; Mrs. Mackworth-Praed ; Mrs. V. J. Parson; Miss B. N. Solly; Sherman Stonor; Capt. R. L. Waud; Mrs. Witherby.

Mr. H. M. Wallis read the following notes from a letter dated January 1, 1936, received from Miss Ruth Cooper, British Consulate, Fez. :—

Panurus b. biarmicus (L.).

Seen once, March 3, 1929, about four miles from Fez, near a little wadi. I supposed it on migration, and have never seen it since. I was quite near and had excellent views. I am told this is the first record for Morocco.

Note by Mr. Wallis.—I have seen three birds of this species, on April 11, 1911, at Lac Fetzara, Bône, Algeria. They were clinging to the stems of tall reeds, flying and uttering their peculiar metallic note like the release of a wire coil. One bird had the distinctive grey head and black moustaches.

Sylvia deserticola Tristram.

Singing, perched on top of a juniper bush on a hillside much frequented by Wheatears some forty-two miles south of Fez in Middle Atlas.

Sylvia c. inornatus Tsch.

One came to our housetop in Fez on April 11, 1930, and again on April 14, 1930. It was seeking insects in the plants, and allowed me to approach within four feet of it. It was in fine plumage, very rich colour, and probably passing on migration. One seen at Sefrou in very worn plumage on Aug. 27, 1933. These are the only two I have seen.

Spinus spinus L.

On Feb. 21, 1924, I saw a small flock in the public gardens at Fez, feeding hungrily on grass-seeds on the ground. I was allowed a close view. These are the only Siskins I have seen here.

Fringilla montifringilla L.

One seen with Chaffinches outside Fez, Feb. 9, 1930. I know it at home. Its white rump was very clear when on the wing. It is my only record for it in or around Fez.

Emberiza striolata sahari Levaillant jun.

Common in southern Morocco, but on April 12, 1925, I saw two at Teza ; I was quite close to them as they sat singing on the Mosque Tower. Admiral Lynes told me he thought it had not been recorded so far north before.

Turdus musicus L. (Redwing.)

My only record is two together in an orchard just outside Fez, Feb. 18, 1934.

Monticola saxatilis (L.).

My sole record here is one female just outside Fez, April 4, 1934. I subsequently verified the bird I had seen at the British Museum of Natural History.

Œnanthe leucopyga (Brehm).

Several at Erfoud and neighbourhood, *i. e.*, border of the Sahara, Nov. 6 and 7, 1934.

Riparia rupestris (Scopoli).

A winter visitor to Fez, where it is not uncommon, but very local. Earliest noted Oct. 23, 1927 ; latest March 3, 1930. I have notes of seeing this bird Oct., Nov., Dec., Jan., and Feb. in various years, usually a number together. I have never yet heard its voice, nor the slightest sound, even though they have been flying around quite close to me.

Milvus milvus milvus (L.).

Only on two occasions have I met with this Kite during more than thirty years' bird-watching here. On Aug. 28, 1927, two flew close around and over me on a wild rocky hillside. I had a very clear view of them. Another time, Sept. 6, 1931, near Fez, one was sailing over me.

Clamator glandarius (L.).

This is a species which I set down out of its proper place, it having presented itself whilst the foregoing pages were being written, my latest record.

On Jan. 2, 1936, I saw this, a new species for me. It is said to winter in Central and South Africa. We had a fine view. It flew to a tree near us, and after sitting for a few moments flew away, circled, and returned to a tree still nearer.

Mr. H. F. Witherby made some remarks on the question of bombing on the Northumberland coast, and stated that the British Ornithologists' Union were asking the Air Ministry to be allowed to send representatives of the Union to the conference on February 17 next. He asked any Member who had any actual experience of the effect of bombing on birds to let the British Ornithologists' Union have the results of any observations they had made.

Mr. B. W. Tucker gave an account, illustrated by lantern-slides, of his trip to South Spain in April 1935, in company with Messrs. H. J. R. Pease and G. K. Yeates.

Visits to the sierras between Arcos and Ronda, to the Gibraltar neighbourhood, the district of Vejer and the Laguna de la Janda, the Marismas and the Coto Doñana were described and illustrated, the slides of scenery, vegetation, etc., being supplemented by Mr. Yeates's photographs of Buff-backed Herons, Flamingoes on the wing, and Griffon-Vultures at a carcase. A hundred and eighty species were observed in three weeks, including Lammergeier and Caspian Tern, as well as nearly all the characteristic South Spanish species and a number of passing migrants, chiefly Waders. Azure-winged Magpies were found to have extended their range to the pine country of Las Marismillas, near the mouth of the Guadalquivir, where they were absent in Abel Chapman's time and at the date of more recent visits by Mr. Jourdain and others, and a large and flourishing colony of Buff-backed Herons, not previously recorded, was located outside the Marismas.

Dr. G. Carmichael Low gave a description of his recent tour round the world with the British Medical Association, and an account of some of the more interesting birds seen during the journey. This was illustrated by a series of pictures on the epidiascope.

The voyage started on Saturday, July 27, 1935, from Southampton to New York. Little was seen in the Solent with the exception of Herring Gulls (*Larus a. argentatus*) and Black-headed Gulls (*Larus r. ridibundus*), but off the Irish coast Great Black-backed Gulls (*Larus marinus*), British Lesser Black-backed Gulls (*Larus fuscus graellsii*), Herring Gulls (*Larus a. argentatus*), these last predominating, a few Manx Shearwaters (*Puffinus p. puffinus*), two Fulmar Petrels (*Fulmarus g. glacialis*), Gannets (*Sula bassana*), some young birds of the year, Cormorants (*Phalacrocorax c. carbo*), and two Storm Petrels (*Hydrobates pelagicus*) were observed.

The Gulls soon stopped following the ship, and things became very quiet until the afternoon of the third day out, when North Atlantic Shearwaters (*Puffinus kuhlii borealis*) were noted, and on the following day a Buffon's or Long-tailed Skua (*Stercorarius longicaudus*). The middle of the Atlantic was very barren of life, but near the American coast birds appeared again—Sooty Shearwaters (*Puffinus griseus*), Audubon's Shearwater (*Puffinus assimilis lherminieri*), Wilson's Storm Petrel (*Oceanites oceanicus*), Leach's Petrel (*Oceanodroma leucorhoa*), American Herring Gulls (*Larus argentatus smithsonianus*), and Laughing Gulls (*Larus atricilla*).

New York was reached on August 3, and the route followed across America was *via* Washington, Chicago, Kansas City, Albuquerque, the Grand Canyon, Los Angeles, and San Francisco. Quite a large number of the commoner American birds were seen during this journey, the most noteworthy being the Red-shouldered Blackbird (*Agelaius ph. phœniceus*), the Purple Grackle (*Quiscalus q. quiscula*), the Baltimore Oriole (*Icterus galbula*), the Spotted Sandpiper (*Tringa macularia*), the Eastern or American Crow (*Corvus b. brachyrhynchos*), and the Ring-billed Gull (*Larus delawarensis*) around New York. Green Heads (Mallards) (*Anas p. platyrhynchos*), American Coots (*Fulica a. americana*), many

American Egrets (*Casmerodius albus egretta*), and a Pied-billed Grebe (*Podilymbus p. podiceps*) were added to the list on the marshy ground by the Potomac River, and the Eastern Phœbe (*Sayornis phœbe*), the Eastern Cow Bird (*Molothrus a. ater*), Barn Swallow (*Hirundo erythrogastra*), American or Eastern Goldfinch (*Spinus t. tristis*), Eastern Mocking Bird (*Mimus p. polyglottos*), Eastern American Robin (*Turdus m. migratorius*), and an American Osprey or Fish-hawk (*Pandion haliætus carolinensis*) at Mount Vernon, George Washington's old home. A Harrier or Marsh Hawk (*Circus hudsonius*), Northern Blue Jays (*Cyanocitta c. cristata*), many Eastern Mourning Doves (*Zenaidura macroura carolinensis*), and Eastern Ground Doves (*Columbigallina p. passerina*) were seen in the fields on the way to Chicago, while two Black Terns (*Chlidonias nigra surinamensis*) and Ring-billed Gulls (*Larus delawarensis*) were observed flying over Lake Michigan, and Purple Martins (*Progne s. subis*) flying round an hotel on the shores of the lake. The ubiquitous English Sparrow (*Passer d. domesticus*) was everywhere, and in the eastern parts of the States the English Starling (*Sturnus v. vulgaris*) was also very common.

It was very hot at Kansas City, 102° F. in the shade, but after La Junta the train passed through prairie land some 7000 feet above sea-level and then through an arid, mountainous area with scrubby growth, by Wagon Mound and Las Vegas, to Albuquerque in New Mexico. Items of ornithological interest were not very numerous, but some birds were identified, viz., the Rio Grande Meadow Lark (*Sturnella magna hoopesi*), the Western White-winged Dove (*Melopelia asiatica mearnsi*), a Prairie Falcon (*Falco mexicanus*), a Richardson's Merlin or Pigeon Hawk (*Falco columbarius richardsoni*), a pair of Golden Eagles (*Aquila chrysaëtos canadensis*), and a Spotted Sandpiper (*Tringa macularia*) in the bed of the Rio Grande River.

After Albuquerque a visit was paid to the Grand Canyon, and the sunrise over this was a magnificent spectacle, as, indeed, were the different views into the great gorge. Time did not permit of much bird-study here; a group of Long-tailed Chickadees (*Penthestes atricapillus septentrionalis*) were feeding in some pine trees by the hotel, and Chimney Swifts (*Chætura*

pelagica) and White-throated Swifts (*Aëronautes s. saxatalis*) were flying about on the face of the cliffs.

From Los Angeles to San Francisco the railway runs along the sea-shore for the first part of its course, through Santa Barbara, etc., and the following birds were seen from the train :—Brandt's Cormorant (*Phalacrocorax penicillatus*), the Californian Brown Pelican (*Pelecanus occidentalis californicus*), the Western Gull (*Larus o. occidentalis*), two large flocks of Marbled Godwit (*Limosa fedoa*), White-winged Scoter (*Melanitta deglandi*), and several Great Blue Herons (*Ardea h. herodias*) ; and in the second part, where the track turns inland, the Western Red-tailed Hawk (*Buteo borealis calurus*), the Turkey Buzzard or Vulture (*Cathartes aura septentrionalis*), Inca Doves (*Scardafella i. inca*), Mexican Ground Doves (*Columbigallina passerina pallescens*), Lark Buntings (*Calamospiza melanocorys*), and three Western Willets (*Catoptrophorus semipalmatus inornatus*).

In San Francisco a visit was paid to the famous Seal Rocks at Cliff House, and then to the California Academy of Sciences in the Golden Gate Park to call on Mr. Harry S. Swarth, who has since died. In this park there were several California Quails (*Lophortyx c. californica*), Nuttall's Sparrow (*Zonotrichia leucophrys nuttalli*), two Western Tanagers (*Piranga ludoviciana*), and American Pintails (*Anas acuta tzitzihoa*) on a lake.

A Surf Scoter (*Melanitta perspicillata*), Western Gulls (*Larus o. occidentalis*), Brandt's Cormorant (*Phalacrocorax penicillatus*), and California Brown Pelicans (*Pelecanus occidentalis californicus*) were noted on passing out of the harbour of San Francisco *en route* for Australia.

On the afternoon of the first day out Black-footed Albatrosses (*Diomedea nigripes*), the common species of Albatross found in the Northern Pacific Ocean, appeared and followed the ship for some days. Approaching the Hawaiian Islands, a Wandering Tatler (*Tringa incana*) circled the ship twice, while closer in, the Sooty Tern (*Sterna fuscata oahuensis*), the Hawaiian Noddy (*Megalopterus melanogenys*), the Hawaiian Petrel (*Pterodroma phæopygia sandwichensis*), and the Red-footed Booby (*Sula piscatrix rubripes*) were seen. At Hono-

lulu large numbers of Common Indian Mynas (*Acridotheres t. tristis*) (introduced) were seen. The English Sparrow (*Passer d. domesticus*), another introduction, was also present, and two kinds of Dove.

After crossing the Equator Great Frigate Birds (*Fregata minor palmerstoni*), Red-billed Tropic Birds (*Phaëthon æ. æthereus*), and Common Noddies (*Anous stolidus unicolor*) began to appear, indicating that some land was near. This land, a wonderful, isolated coral atoll, known to the sailors as "One-Tree Island" or, more correctly, as Mary or Canton Island, is the northernmost unit of the Phœnix group. From it birds rose in myriads as the ship passed by. There were Great Frigate Birds (*Fregata minor palmerstoni*), Red-billed Tropic Birds (*Phaëthon æ. æthereus*), and Red-tailed Tropic Birds (*Phaëthon rubricaudus rothschildi*), Common Noddies (*Anous stolidus unicolor*), Blue-Grey Noddies (*Procelsterna cerulea nebouxi*), Red-footed Boobies (*Sula piscatrix rubripes*), White-faced Shearwaters (*Puffinus leucomelas*), and two Phœnix Petrels (*Pterodroma parvirostris*).

Fiji was disappointing as regards birds; there were introduced Common Indian Mynas (*Acridotheres t. tristris*) and Indian Red-vented Bulbuls (*Molpastes c. cafer*), but only a few indigenous birds were noted. On the passage up the Hauraki Gulf to Auckland and coming back through this again on the way to Australia bird-life abounded.

Amongst species of special note were the Albatrosses, the Light or Grey-mantled (*Phœbetria palpebrata*) rare, the Black-browed (*Diomedea* (*Thalassarche*) *melanophris*) and the Wandering (*Diomedea exulans*) common, as were also Giant Petrels (*Macronectes giganteus*), while a few Cape Pigeons (*Daption capense*) appeared one day. Flocks of Dove Prion (*Pachyptila desolata*), Sooty Shearwaters (*Puffinus griseus*) in large numbers, a few Grey-backed Shearwaters (*Puffinus bulleri*), and Australian Gannets (*Sula serrator*) were also in evidence.

Across the Tasman Sea some magnificent examples of *Diomedea exulans* and many *Diomedea melanophris* were seen.

In Australia several days were spent in ornithology alone,

and so many species of birds were seen that space will not permit of mentioning more than a few of the more important ones. The White-backed Magpie (*Gymnorhina hypoleuca leuconota*), the Black-backed Magpie (*Gymnorhina t. tibicen*), the Magpie Lark (*Grallina c. cyanoleuca*), and the Laughing Kookaburra or Laughing Jackass (*Dacelo n. novæguineæ*) were everywhere. Two days, however, stand out specially, a visit to the Dandenong Hills and Sherbrooke Forest at Melbourne, with Dr. Charles Kellaway, and one to the Jenolan Caves in the Blue Mountains near Sydney. In Sherbrooke Forest a Lyre Bird (*Menura novæ-hollandiæ*) was seen near its nest, in which a full-grown young one was sitting, and the male was heard calling in the valley below. Other birds of special interest here were the Eastern Coachwhip Bird (*Psophodes o. olivaceus*), the Eastern Rosella (*Platycercus eximius*), the Crimson Rosella or Red Lory (*Platycercus elegans*), and the Blue Wren (*Malurus c. cyaneus*). At the Jenolan Caves, in the Blue Mountains, Grey Currawongs (*Strepera v. versicolor*), Pied Currawongs (*Strepera g. graculina*), the Blue Mountain Lory (*Trichoglossus moluccanus*), a male Satin Bower Bird (*Ptilonorhynchus v. violaceus*) with six females, Crimson Rosellas (*Platycercus elegans*), Eastern Rosellas (*Platycercus eximius*), Kookaburras (*Dacelo n. novæguineæ*), and Blue Wrens (*Malurus c. cyaneus*) increased the interest of an already delightful day. Nor must the Rock Wallabies (*Petrogale penicillata*), which came down from the hills in the mornings and even went the length of taking bread from one's hands, be forgotten.

On the northern shore of Sydney Harbour is the Taronga Zoological Park, marvellously situated on rising ground overlooking the harbour. The wild birds seen in this park were a Tawny Frogmouth (*Podargus strigoides*) sleeping on the bough of a tree, a Black-faced Cuckoo-Shrike (*Coracina novæ-hollandiæ*) flitting about its nest, also in a tree, while Blue Wrens (*Malurus c. cyaneus*), Scarlet Robins (*Petroica multicolor*), and Black and White Fantails (*Rhipidura leucophrys*) hopped about the lawns and bushes.

Black Swans (*Chenopis atrata*) were seen on a lagoon by

the coast. Little Pied Cormorants (*Microcarbo melanoleucus*) and Reef Herons (*Demigretta sacra*) attracted attention just by the mouth of the Hawkesbury River.

The visit to Australia ended at Sydney, and sail was set for home by way of the Great Barrier Reef and the Dutch East Indies to Singapore. The first day out, Australian Gannets (*Sula serrator*) and Short-tailed Shearwaters (*Puffinus tenuirostris*), the "Mutton Birds" of the Bass Straits, were fairly numerous.

On the way down the Brisbane River to the sea Silver Gulls (*Larus novæ-hollandiæ*), Pacific Gulls (*Gabianus pacificus*), Australian Pelicans (*Pelecanus conspicillatus*), Pied Cormorants (*Phalacrocorax varius*), Little Pied Cormorants (*Microcarbo melanoleucus*), two Sea Eagles (Brahminy Kite) (*Haliastur indus leucosternus*), and several Curlews (*Numenius cyanopus*) were observed.

The Great Barrier Reef, about which so much has been written, lived up to expectations, and on Tuesday, September 24, the ship passed a constant succession of coral atolls and islands all day. Some of these were a considerable distance away, but with the telescope hundreds of turtles could be seen lying on some of them, and countless birds on others. The following list comprises the most notable birds seen. Great White Egret (*Egretta alba*), White-necked Heron (*Notophoyx pacifica*), Australian Pelican (*Pelecanus conspicillatus*), Curlew (*Numenius cyanopus*), Oyster-catcher (*Hæmatopus ostralegus longirostris*), Silver Gull (*Larus novæ-hollandiæ*), Crested Tern (*Sterna bergii poliocerca*), Sooty Tern (*Sterna fuscata serrata*), Roseate Tern (*Sterna dougallii gracilis*), Common Noddy (*Anous stolidus antelius*), White-capped Noddy (*Anous* (*Megalopterus*) *minutus*), Great Frigate Bird (*Fregata minor mathewsi*), and Lesser Frigate Bird (*Fregata ariel*).

A Bee-eater or Rainbow Bird (*Merops ornatus*) flew past off Cape York, and two more came on board and settled on one of the stays of the mast later in the day.

During the next few days a flock of over thirty Blue-faced Boobies (*Sula dactylatra personata*) were seen fishing and in some instances being attacked and robbed of their prey by three Great Frigate Birds (*Fregata minor mathewsi*),

veritable pirates of the sea. A Red-backed Kingfisher (*Halcyon pyrrhopygius*) came on board and rested for some time on the mast. At Macassar (Celebes) many Fork-tailed or Black Kites (*Milvus migrans napieri*) and Eastern Swallows (*Hirundo rustica gutturalis*) were flying about the harbour, and during a drive inland Tree-Sparrows (*Passer montanus malaccensis*), Cattle Egrets (*Bubulcus ibis coromandus*), Brahminy Kites (*Haliastur indus ambiguus*), Sacred Kingfishers (*Halcyon sancta*) and three other varieties of Kingfisher, a Common Sandpiper (*Tringa hypoleucos*), and a Grey-rumped Sandpiper (*Tringa brevipes*) were observed.

At Bali several Waders were feeding on the newly-flooded rice-fields, which looked most attractive to these birds. The Grey-rumped Sandpiper (*Tringa brevipes*) and the Marsh Sandpiper (*Tringa stagnatalis*) were specially noted.

A land journey was made from Sourabaya to Batavia, and the avifauna was interesting. Javan Grackles (*Gracula r. religiosa*), Javan Pied Mynas or Rose-coloured Starlings (*Sturnopastor contra jalla*), Cattle Egrets (*Bubulcus ibis coromandus*), and Wood Swallows (*Artamus leucorhynchus amydrus*) were common, but, strangely enough, only a few Java Sparrows (*Padda oryzivora*) were observed. Black Drongoes (*Dicrurus macrocercus javanus*) were also fairly numerous.

Little was seen in Singapore, but at Kuala Lumpur a Bee-eater (*Merops v. viridis*) and a Lesser Racquet-tailed Drongo (*Bhringa remifer peracensis*) were specially noted.

A visit to the Towers of Silence at Bombay showed numerous Vultures (*Gyps indicus* and *Pseudogyps bengalensis*) hanging about and waiting for their next meal. Indian or Grey-necked Crows (*Corvus s. splendens*), Black Crows or Indian Corbies (*Corvus coronoides levaillanti*), Black Kites (*Milvus migrans govinda*), and Brahminy Kites (*Haliastur indus indus*) were all very abundant.

Crossing the Arabian Sea, an Indian Skimmer (*Rhyncops albicollis*) flew by, and nearing the coast of Arabia a Hobby (*Falco subbuteo*) rested for a while on the ship and then continued its journey south. Large numbers of Wilson's Storm Petrel (*Oceanites oceanicus*) were resting one day on the sea,

which was dead calm and oily, and several flocks of Red-necked Phalaropes (*Phalaropus lobatus*) and a small flock of what might have been Grey Phalaropes (*Phalaropus fulicarius*) were encountered.

At Aden the Yellow-legged Gull (*Larus cachinnans*) and the Red Sea Black-headed Gull (*Larus leucophthalmus*) were flying about, and on shore in the salt-pans several Redshank (*Tringa t. totanus* or, possibly, *Tringa t. eurhinus*) and a Pink-backed Pelican (*Pelecanus rufescens*) were feeding.

In the Red Sea the Aden Gull (*Larus hemprichi*), the Red-footed Booby (*Sula piscatrix*), and the Brown Booby (*Sula leucogaster*) were numerous, and a Lanner (*Falco biarmicus* ? subsp.) and several White Wagtails (*Motacilla alba*) came on board.

Between Suez and Port Said, on the overland route, there were many Black Kites (*Milvus migrans ægyptius*) in Cairo, Cattle Egrets (*Bubulcus i. ibis*) in flooded fields *en route* to the Pyramids, Swallows (*Hirundo rustica*), several Swifts (*Micropus apus* ? subsp.) and Wagtails, and other small Passerines migrating.

Only some Eastern Mediterranean Shearwaters (*Puffinus p. yelkouan*) and some White Wagtails (*Motacilla alba*) were observed on the passage from Port Said to Malta. Between Malta and Marseilles passing migrants were frequent, viz., a Rock Thrush (*Monticola saxatilis*), several Continental Robins (*Erithacus rubecula sardus*) probably, a Redstart (*Phœnicurus ph. phœnicurus*), and a female Chaffinch (*Fringilla cœlebs*), most of those resting on the ship for various periods of time.

The trip was a wonderful one in every way, and lasted from July 27 to November 2, 1935, over two hundred and forty species and subspecies of birds being seen and recorded.

The Rev. F. C. R. Jourdain made the following remarks :—

R. Swinhoe in ' The Ibis ' for 1874, pp. 422–447, and 1875, pp. 114–146, published some notes made during his stay at Chefoo (Shantung, N. China) from May 25 to Oct. 20 (year not stated).

The lighthouse keeper, Mr. Campbell, sent him a female

Oyster-catcher from the North Rock on May 8, and on the 15th its mate. This was the Chinese race which Swinhoe had described as *H. osculans*. Finding the eggs in the ovary of the female well developed, Swinhoe sent one Constable Webster to search the rock on June 22. He found several pairs, and in some cases triplets, of eggs lying in depressions near the edge of a small plateau near the top, and counted six or seven of them, but saw no birds. The first egg he picked up was rotten, another proved to be fresh when broken, and the constable brought back five of the freshest eggs. Seeing no bird, he shot a Shag (*P. pelagicus*), and brought it back as possibly one of the owners of the eggs.

One egg proved to be fresh, the rest bad. They bore some resemblance to Hewitson's figure of the egg of the British Oyster-catcher; so, says Swinhoe, "it is pretty clear that one pair of Oyster-catchers were the parents of the whole dozen or so of eggs that Mr. Campbell found. What could have induced the female to lay eggs and then desert them? Could she have been constrained by the instinct that is said to impel the Ostrich thus to provide maggots by the attracting putridity of the abandoned eggs for the first food of her own favoured hatchlings, which, when first born, are too weak to travel far in search of them? I learn from Hewitson that the European Oyster-catcher does make some kind of nest for its eggs, but from Gould that the Australian *H. longirostris* does not. The affinity of our intermediate species in this respect, as in that of form and colour, is consequently more for its Australian ally" (Ibis, 1875, p. 131). Two of these eggs came through Seebohm to the British Museum. E. W. Oates actually figured one of them in the Cat. Eggs. Brit. Mus. ii. pl. i. fig. 3, and remarked that they were of very abnormal shape and coloration!

When I was at work on the collection I saw these eggs, and at once recognized them as those of *Synthliboramphus antiquus*, the Ancient Auklet. This species was not known to breed in N. China, but does breed in the Aleutians, Commander Isles, the Amurian coast, Sakhalin, the Pribilofs, and the Kuriles, and has occurred in China (Foo-chow).

Recently I bought the second volume of La Touche's 'Handbook of the Birds of Eastern China.' Of the Ancient Auk (which, by the way, he has named Bering's Guillemot !) he had three specimens from the Formosa Channel, dated March and April, and Rickett had others, but seems to have no idea that it could possibly breed in China. Turning to the account of the Chinese Oyster-catcher (*H. o. osculans*), on pp. 342–343 I was horrified to find Swinhoe's account quoted at some length as the only evidence of the breeding of the Oyster-catcher in China !

The impossible nature of Swinhoe's speculations becomes obvious when one considers that the Oyster-catcher female was shot on May 8, and if six clutches had been laid by her on that date, the first must have been laid early in February, allowing a fortnight between each clutch. As northern China has a severe winter climate, it is quite incredible that this species could have been breeding at such an early date.

All this shows (1) the importance of keeping dubious and erroneous statements out of printed records ; (2) the necessity of correcting them with equal publicity, and of annotating the erroneous records in books of reference.

Mr. Guy Harrison exhibited a series of eggs of the Shiny Cowbird of South America (*Molothrus b. bonariensis*), which he had obtained between October and December 1935 in South-East Brazil and in Uruguay, and also a few examples found during two other visits some years previously.

He also made the following remarks :—

The great variation in type of individual eggs seems to indicate that these differences originally evolved by natural selection and by the elimination of patterns which did not approximate to those of the various fosterers employed. This theory seems to receive confirmation by the difference between the eggs of *Molothrus b. bonariensis* and those of the subspecies *Molothrus b. melanogyna* from Brazil, in which the ground-colour usually appears to be of a greenish shade, white eggs, apparently, being very rare.

If, however, natural selection has been responsible for the divergence of type, it does not appear to be operating in the

selection of fosterers at the present time, at all events in the parts of Uruguay which were visited. It seems, indeed, as if the opposite process was now occurring, owing to the activity of the parasite, and that a very real decrease must be taking place amongst any fosterers which are not prepared to accept the eggs of the Cowbird, and which desert their nests in consequence.

In the Santa Lucia and Maldonado districts of Uruguay the commonest fosterers durng November appear to be *Furnarius rufus*, *Brachyspiza capensis*, *Pitangus bolivianus*, and *Mimus modulator*. In some ten or fifteen nests of the last-named which were examined no bird succeeded in completing its laying without the deposition of one or more Cowbirds' eggs, and only one nest of *B. capensis* was noticed that had escaped attention. On the other hand, *Sicalis arvensis*, which was very common in the same district, and which has eggs somewhat similar in appearance to *B. capensis*, did not seem to be victimized to any appreciable extent, and only one nest out of over thirty examined contained a parasitic egg. This is rather remarkable when one takes the ubiquitous instinct of the Cowbird into account, and also that the nests of *S. arvensis* were usually considerably more conspicuous than those of *B. capensis*. About 60 per cent. of the nests of *Furnarius rufus* which were examined were victimized, and about 40 per cent. of those of *P. bolivianus*. It is generally found that the latter is an unusual fosterer, but in the Santa Lucia district very little more than half of the nests escaped interference.

It has been stated that *M. b. bonariensis* does not care to utilize the large stick-nests of many of the Dendrocolaptine species, such as the Lenatero, and this agrees with my own observations. I think, however, the reason is due, not to an inherent dislike of domed nests constructed of thorns, but to the long and winding passage which leads to the nesting-chamber. I have noticed in certain cases where a short cut to the nesting-chamber has been made by *Agelaioides badius* or other birds that the nest has been visited by *M. b. bonariensis*. In one instance I found an old nest of the Lenatero in which a new entrance had been made, and which

contained seven eggs of *M. b. bonariensis*; another instance where there were three eggs; and a further similar nest in which *M. b. bonariensis* was parasitic on *A. badius*.

The two sets shown of eggs of *A. badius* and *M. rufo-axillaris* were taken from the same Lenatero's nest. One set, consisting of four eggs of the former and two of the latter, was obtained on November 27, and on December 6 a further four eggs of the latter and three of the former had been deposited.

Mr. C. M. N. White sent the following note on the Australian Tree-Martin (*Petrochelidon nigricans*) :—

In naming some examples of this bird from South Australia I was obliged to re-examine the whole group, with results rather different from the most recent treatments of the species. It is evident that far too many races have been named, and that characters of immaturity have been used in some cases. I am indebted to Mr. F. E. Parsons of Adelaide for a young bird which makes clear the characters of immaturity, viz., light tips to secondaries, absence of metallic tips to least coverts, which are edged with whitish in fresh-plumaged immatures, much duller upper surface, with metallic colouring restricted to tips of feathers. The frontal spot is not a character upon which to base age, but evidently rapidly wears, showing the dark centres, until it may become almost obsolete. The rufous of the rump and undersurface also wear rapidly to a greyish tinge.

The following races appear valid :—

Petrochelidon nigricans nigricans (Vieillot, Nouv. Dict. d'Hist. Nat. vol. xiv. 1817, p. 523 : Hobart).

Characters.—Large size. Wings, eight males, 105–112; seven females, 105–108; fourteen unsexed, 105–114 mm. Immatures which are smaller must not be included in the above series; fifteen examples have wings 99–105, once 107 mm.

To this race I refer all birds from Tasmania, Victoria, eastern South Australia, New South Wales, Queensland, and examples from New Guinea, Aru and Kei Islands, and other localities where it has been taken as a straggler. All examples

from N. Queensland and New Guinea etc. I regard as non-breeding migrants.

None of the characters ascribed to *P. n. caleyi* (Mathews, Austral Av. Rec. ii. Oct. 1913, p. 65: Albury, New South Wales) hold good in the series examined, the size being subject to too much variation and the colour of the underside to wear. Further, *P. n. papua* (Mathews, Bull. B. O. C. xlviii. 1928, p. 83: Kei Islands) is also a synonym. For some reason it was compared only with the very distinct race *P. n. timoriensis*; the type obtained on July 15 has a wing of 107 mm., and agrees exactly with Australian birds. There is indeed no evidence that the species breeds anywhere in New Guinea, and all birds examined and records consulted are of examples obtained during the Australian "winter" (*e.g.*, Toeal, 15. ix. Nov. Zool. 1903, p. 24; Kumusi R., June–July, Nov. Zool. 1912, p. 197); *cf.* also Stresemann, Orn. Monatsb. 1934, p. 24. *P. n. socialis* (Stresemann, Archiv f. Naturg. 89, Abt. A, Heft 8, 1923, p. 26: Roma) seems also probably a synonym. It was said to differ in its shorter wing—102–105 mm. But the birds obtained by Kühn on Roma and Babar were collected in August (see Nov. Zool. 1904, p. 104; 1906, p. 296). Hellmayr in his 'Avifauna von Timor' could not distinguish them from typical *nigricans*, and the short wing is probably due to their being immatures*. *P. n. rogersi* (Mathews, Austral Av. Rec. i. April 1912, p. 38: Port Darwin) is considered by its author to be the form occurring in North Queensland and Northern Territory. But Queensland birds examined are not separable from *nigricans*. Further published field-notes seem to indicate that the species does not breed at Cape York or about the Gulf of Carpentaria.

There is also in the British Museum an example obtained at sea off the coast of North-West Australia which I regard as referable to typical *P. nigricans*.

Petrochelidon nigricans distinguenda (Mathews, Nov. Zool. vol. xviii. Jan. 1912, p. 301: East Murchison).

* Dr. Mayr kindly informs me that the Rothschild collection contains four examples, all immatures—three measurable have wings 103·5, 104, 106 mm. I therefore regard *P. n. socialis* as a definite synonym of *nigricans*.

Characters.—Small size. Nine males, (98) 100–104; two unsexed, 103; four immatures 99–101 mm. In consequence of the shorter primaries the wing is notably less pointed in this race.

Distribution.—S.W. Australia; range eastwards and northwards requiring further evidence. Probably resident in its distribution. Mr. W. B. Alexander kindly informs me that this is certainly true in the Swan River district.

P. n. neglecta (Mathews, *loc. cit.* p. 301: N.W. Australia) is described immediately before *P. n. distinguenda*, and may have to replace it. But as the type is not available, and may be a migrant of the typical race, I prefer to keep the small form under the name which more certainly applies to it until further information is available.

Petrochelidon nigricans timoriensis (Sharpe, Cat. Birds Brit. Mus. vol. x. 1885, p. 192: Timor).

A very distinct race, requiring no further definition. Wing 90–93 mm. There is in the British Museum an example from Flores (Coll. Wallace. Reg. no. 88.7.12.352). The species is not mentioned by Rensch in his paper, "Die Vogelwelt v. Lombock, Sumbawa u. Flores" (Mitteil. Zool. Mus. Berlin, Bd. 17, Heft 4, 1931).

I have, in conclusion, to thank Mr. George Mack, of the Australian National Museum, for notes on specimens in that Museum.

The Rev. F. C. R. Jourdain informs us that with reference to his note in the 'Bulletin,' lvi. 1936, p. 68, on the White-breasted Sea Eagle of the Solomon Islands, he has ascertained that Dr. E. Mayr has already described this form as a species under the name *Haliæëtus sanfordi* ('American Museum Novitates,' no. 820, Oct. 10, 1935).

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following note on the correct type-locality of *Hemiparra crassirostris crassirostris* (Hartlaub, J. f. O. 1855, p. 427):—

Hartlaub gives Nubia, and this has been quoted by all authors. Hartlaub heads his note "Ueber *Chettusia crassi-*

rostris de Filippi " ; and under date March 2, 1935, Prof. Oscar Neumann has very kindly informed us that the type was collected by Brun Rollet, who collected the birds described by Defilippi on p. 289, Rev. Mag. Zool. 1853. Prof. Oscar Neumann remarks : " Probably the Lapwing came with a second lot, which was described by Defilippi at the Paris Museum ; while duplicates were given to Verreaux, from whom Hartlaub bought the type." On this very reliable information we can safely conclude that the type of this Lapwing was collected in the same locality as the birds described by Defilippi, and, therefore, the correct type-locality of *Hemiparra crassirostris crassirostris* (Hartlaub) should be the White Nile, between 3° and 4° N. lat., Southern Sudan.

In the same letter Prof. Oscar Neumann informs us that the type of *H. c. hybrida* Reichenow (Orn. Monatsb. xvii. 1909, p. 42) came from Shirati, eastern shore Lake Victoria, Mwanza Province, Tanganyika Territory, and that this type-specimen is almost a true *H. c. crassirostris*.

We are of opinion that *H. c. hybrida* is a synonym of *H. c. crassirostris*.

NOTICES.

The next Meeting of the Club will be held in conjunction with the Annual Dinner of the British Ornithologists' Union on Wednesday, March 11, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear

on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

Film.—Birds in flight. C. Horton Smith.
Film.—Nesting of the Hobby. Dr. Kenneth Morris.
Slides.—Diurnal and nocturnal activities of the Manx Shearwater. Captain H. Morrey Salmon.
Slides.—Isle of May Bird Observatory. W. B. Alexander.
Slides.—Spoonbill, Icterine Warbler, etc. Ian M. Thomson.
Slides.—Ducks, decoys, and migration. H. A. Gilbert.

Bird Room

7 APR 1936
PURCH

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXCIV.

The three-hundred-and-eighty-ninth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, March 11, 1936.

Mr. H. F. Witherby, the President of the B. O. U., took the Chair during the Dinner, and Mr. G. M. Mathews, Chairman of the Club, during the subsequent proceedings.

Members of the B. O. C. present:—Miss C. M. Acland; W. B. Alexander; E. C. Stuart Baker; Miss P. Barclay-Smith; Miss R. G. Barnes; F. G. F. Barrington; H. B. Booth; A. W. Boyd; G. Brown; P. F. Bunyard; Hon. G. L. Charteris; Maj.-Gen. Sir Percy Z. Cox; J. Cunningham; A. Ezra; Miss J. M. Ferrier; H. A. Gilbert; Col. A. E. Hamerton; R. E. Heath; P. A. D. Hollom; Lt.-Commdr. A. M. Hughes, R.N.; Major H. W. Hutson; Dr. K. Jordan; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss C. Longfield; Dr. P. R. Lowe; W. P. Lowe; C. W. Mackworth-Praed (*Treasurer*); Capt. J. H. McNeile; Lt.-Col. H. A. Magrath; Dr. P. H. Manson-Bahr; Dr. W. N. May; E. M. Nicholson; C. W. G. Paulson; H. Pease; Miss G. Rhodes; B. B. Rivière; W. L. Sclater; D. Seth-Smith; Major M. H. Simonds; Col. R. Sparrow; C. G. Talbot-Ponsonby;

Marquess of Tavistock ; Dr. A. Landsborough Thomson (*Hon. Sec.*) ; B. W. Tucker ; Miss E. L. Turner ; H. M. Wallis ; H. Whistler (*Vice-Chairman*) ; W. H. Workman ; C. G. M. de Worms.

Members of the B. O. U. present :—Major R. S. P. Bates ; H. G. Calkin ; Miss B. A. Carter ; Mrs. E. Stafford Charles ; R. Chislett ; A. G. Clark ; H. P. S. Clogstoun ; E. Cohen ; H. J. S. Douglas ; F. H. Edmondson ; A. K. Gibbon ; Roland Green ; S. H. Hart ; A. G. Haworth ; Miss A. Hibbert-Ware ; Mrs. C. Hodgkin ; E. J. Hosking ; J. Spedan Lewis ; E. I. May ; C. A. Norris ; E. R. Paton ; W. H. Payn ; Capt. O. G. Pike ; Major H. M. Salmon ; W. Serle, jun. ; D. Abel Smith ; I. M. Thomson ; N. Tracy ; W. E. Wait ; C. H. Wells.

Guests of the Club :—Mr. and Mrs. C. Horton-Smith ; Dr. Kenneth Morris.

Guests :—E. W. Arnold ; Miss M. B. Atkins ; Mrs. E. C. Stuart Baker ; M. Barclay ; E. C. Barnes ; S. H. G. Barnett ; Mrs. R. S. P. Bates ; Mrs. A. W. Boutward ; Mrs. G. Brown ; Mrs. Calkin ; D. Charles ; Mrs. D. Charles ; Miss E. T. Chawner ; Mrs. R. Chislett ; Dr. A. E. Cohen ; A. Condray ; Lady Cox ; Mrs. H. J. S. Douglas ; G. Fane ; Miss R. S. R. Fitter ; Mrs. G. Fosdick ; P. W. Gaddum ; Mrs. H. A. Gilbert ; Miss J. Grenander ; Lt.-Commdr. A. A. Havers, R.N. ; J. L. Hawkins ; Mrs. A. G. Haworth ; Miss A. E. Housman ; Miss E. Hulse ; R. S. Jenyns ; Miss E. M. King ; H. B. Lawson ; Mrs. Lawson ; R. M. Lockley ; Miss L. Lodge ; Mrs. P. R. Lowe ; R. Preston Maclean ; P. H. Martin ; Mrs. Martin ; Miss J. M. May ; H. R. Maynard ; Mrs. Maynard ; D. M. Murray-Rust ; W. H. Perrett ; F. Pike ; Mrs. O. G. Pike ; Mrs. W. L. Sclater ; Miss R. Seth-Smith ; Mrs. M. H. Simonds ; Miss D. Sleigh ; Mrs. Abel Smith ; E. Hugh Smith ; N. Stevens ; L. A. Tangye ; A. C. Thomes ; Mrs. A. Landsborough Thomson ;

A. Tracy ; Mrs. B. W. Tucker ; Jim Vincent ; Miss T. Wake ; Miss F. Waldron ; E. C. Watt ; Brian Weston ; D. S. Wintle ; Mrs. H. F. Witherby ; H. Woollard ; Mrs. Woollard.

Members of the B.O.C., 52 ; Members of the B.O.U., 30 ; Guests of the Club, 3 ; Guests, 67 ; and 8 others. Total, 160.

Captain H. Morrey Salmon showed slides illustrating the diurnal and nocturnal activities of the Manx Shearwater. These included photographs of flocks at sea during the day and assembling near the coast in the evening, and flashlight photographs of the birds at their burrows on Skokholm, Pembrokeshire, and taking off from the island before morning.

Mr. W. B. Alexander showed slides illustrating the work of the bird observatory established on the Isle of May, in the Firth of Forth, including the construction of a trap to catch migrants for ringing. He said :—

The autumn of 1935 was a poor one for the observation of migration on the east coast owing to the absence of any spells of easterly winds. At the Isle of May there was not a single night when migrants were attracted to the light. The observatory was occupied for considerable periods, but the number of volunteers was insufficient to ensure continuous observations. The number of birds trapped during the autumn was 265, representing 35 species. The greatest number caught in a day was 44, captured and ringed by Mr. R. B. Sibson and myself on August 20. Of these, 39 were Willow Warblers. We hope it will not be long before our record is beaten. Altogether 77 Willow Warblers were ringed. The most interesting captures during the season were two Bramblings, two Cirl Buntings, a Continental Coal Tit, five Pied Flycatchers, a Reed Warbler, a Barred Warbler, and two Lesser Whitethroats.

Interesting species seen but not captured included Shore-Lark, Ortolan Bunting, Bluethroat, and Grasshopper Warbler. A Great Shearwater seen off the coast.

Mr. H. A. Gilbert showed slides illustrating the working of a duck decoy. He also indicated on a map some of the records obtained from marked birds.

Mr. C. Horton Smith showed a cinematograph film of birds in flight, taken at Handa, Sutherland. This included normal speed and slow-motion pictures of the Kittiwake, Guillemot, Shag, Oyster-catcher, and Fulmar Petrel.

Mr. Ian M. Thomson showed slides of the Crossbill, Spoonbill, Icterine Warbler, Ruff, Marsh Harrier, Great Crested Grebe, and Lesser Redpoll.

Major R. S. P. Bates showed slides illustrating the bird-life of the Kishenganga Valley, Kashmir, including photographs of typical country and of various species found there.

Dr. Kenneth Morris showed films, taken in Hungary, of the nesting of the Hobby, and Golden Oriole.

Mr. H. F. Witherby sent the following remarks on Mr. G. L. Bates's notes (Bull. B. O. C. vol. iv. Nov. 1934, pp. 46–49), on the races of the Grey Wagtail (*Motacilla cinerea*) :—

Mr. Bates gives detailed measurements of the tails of British birds ranging from 93 to 104 mm., and he considers continental birds to belong to another race under the name (*M. c. caspica*) as averaging smaller in the tail. Unfortunately Mr. Bates does not give the individual measurements of these birds, but he has very kindly supplied them to me, and allows me to discuss them here. Mr. Bates has carefully measured 44 birds from the Continent of Europe, Asia Minor, and Palestine, and of these there are only six which can be distinguished by the length of the tail from British birds, viz., two of 91 mm. and four of 92 mm. Of the twelve Persian and Turkestan birds measured by Mr. Bates it will be seen (p. 48) that only three (90, 91, and 92 mm.) fall below the measurements given for British birds.

In my view a distinction based on an average measurement of this kind is not advisable, and certainly has no practical value. I should therefore place the name *M. caspica* as a synonym of *M. cinerea* and, although there is evidently

a considerable amount of overlapping in the measurements, should retain *M. melanope* for the eastern race, at all events until more specimens from the region of the typical locality are available. It seems to me clear from Mr. Bates's evidence that the eastern form does not in any case extend so far west as Turkestan and Persia, as was previously considered, and cannot, therefore, bear the name *M. caspica*.

Dr. Finn Salomonsen sent the following note on a new race of the Willow Grouse :—

The islands off the Trondhjems Fjord in western Norway are inhabited by a sedentary, very peculiar race of the Willow Grouse, which I propose to call

Lagopus lagopus variegatus, subsp. nov.

Description.—In autumn dress indistinguishable from *L. l. lagopus* (Linnæus), but differs from that form by having a very retarded moult into winter plumage, and by assuming the white winter plumage only partly. Winter feathers on crown constantly with black base or even quite black. Primaries constantly heavily blotched and marked with dark brownish-black patches and spots (only one out of 27 specimens indistinguishable from *L. l. lagopus*).

Distribution.—Restricted to the islands in the Trondhjems Fjord : Fröya (type-locality), Hitra, Storfosna, from where specimens are examined ; probably also Smöla. 27 specimens examined, all belonging to the Gothenburg Zoological Museum.

Type.—♂ ad., Fröya, Trondhjems Fjord, January 19, 1935, collected by B. Hanson ; in the Gothenburg Zoological Museum.

Remarks.—It is due to the kindness of Prof. L. A. Jägerskiöld that I was able to examine this fine series. The interesting state of winter moult in these birds is already described by the collector, Bernhard Hanson, in 'Norsk Jagar & Fiskeri For. Tidsskrift,' no, 7, 1935, and was mentioned by Prof. Jägerskiöld in 'Göteborgs Musei Aarstryck 1935,' p. 10 ; in both publications are photos showing the plumage.

L. l. variegatus does not begin to assume white winter feathers until November (*L. l. lagopus* in September), and does

not finish the winter moult until January; already in January to February the summer moult is commenced (*L. l. lagopus* in April to May). Especial interest is attached to *L. l. variegatus* as an intermediate form between *L. l. lagopus* and *L. l. scoticus*.

Further particulars will be communicated elsewhere at some future date.

Mr. C. W. Benson sent the following description of a new race of *Alethe macclouniei* :—

Alethe macclouniei njombe, subsp. nov.

Description.—Differs from *Alethe macclouniei* in having a darker, less olive back and rump, upper and under tail-coverts much brighter cinnamon, and the tail-feathers more conspicuously diffused with this same cinnamon colour.

Distribution.—The distribution of the two races of *Alethe macclouniei* is, therefore, as follows :—

Alethe macclouniei macclouniei Shelley (Bull. B. O. C. xiii. 1903, p. 61) : Nyika Plateaux, Northern Nyasaland, 7000 feet.

Alethe macclouniei njombe Benson. Only known so far from Njombe, southern Tanganyika Territory.

Type.—An adult male from Njombe, southern Tanganyika Territory, 9·1° S., 34·75° E., 6600 feet, forest jungle. Collected by Lynes-Lowe Expedition. Brit. Mus. Reg. no. 1932.5.10.207.

Remarks.—Nine specimens examined. I am much indebted to Capt. C. H. B. Grant, who has examined my conclusions, and is in agreement with them.

Mr. Benson also sent the following note on the status of the genus *Cryptospiza* in Nyazaland :—

While identifying at the British Museum a collection of birds made by myself in Nyasaland, two Cryptospizæ obtained in the same locality in the Masuku Mts., near the Nyasaland-Tanganyika border, appeared to be attributable to *C. reichenovii sanguinolenta* Vincent and *C. salvadorii australis* Shelley respectively. It occurred to me that in reality these two specimens might be of one and the same species. Numbers of Cryptospizæ were observed on the forest floor, and there was nothing to suggest from observation of the living birds

that there were two distinct speces occurring side by side in the forests of the Masuku Mts. Accordingly I have consulted Capt. C. H. B. Grant, and am most grateful to him for his interest in this problem.

The following are our findings :—

From an examination of specimens in the British Museum identified as *Cryptospiza reichenovii sanguinolenta* Vincent, Bull. B. O. C. liii. 1933, p. 148 * ; *C. salvadorii australis* Shelley, Ibis, 1896, p. 184 ; and *C. r. ocularis* Sharpe, Bull. B. O. C. xiii. 1902, p. 8 †, the birds are divisable into :—

(1) Adult males with red back, rump, upper tail-coverts, lores, and auriculars.

(2) Adult females similar to adult males, but with no red on the lores or auriculars.

(3) Young birds with no red on the lores or auriculars, and with only the upper tail-coverts invariably red. The rump and back often show traces of red.

It seems clear that those birds which fall into category (3) are immature, and that specimens of the three categories are all attributable to one and the same race of one species.

Cryptospiza ocularis is thus the adult of *C. australis* (described from an immature specimen), and we can see no constant difference by which *C. reichenovii sanguinolenta* and *C. r. ocularis* can be distinguished.

We thus arrive at the conclusion that *C. ocularis* and *C. r. sanguinolenta* are synonyms of *C. australis*, which is a subspecies of *C. reichenovii*, not *C. salvadorii*. All Nyasaland Cryptospizæ in the British Museum are therefore attributable to *Cryptospiza reichenovii australis*.

Lastly, Mr. Benson sent the following note on *Apalis bamendæ bensoni* (Vincent) :—

Secured one juv. January 20, 1935 ; one male and one female, gonads subsiding after breeding, February 10, 1935 (all three in forest at 6000 feet, Chongoni Mountain) ; one female, March 31, 1935, forest at 6000 feet, Vipya Plateau ; one male,

* It does not appear that Vincent compared his birds with *C. australis*.

† Sharpe compared this race with *C. reichenovii* only.

August 7, 1935, forest at 6000 feet, Masuku Mountains, with testes enlarged.

Mr. Jack Vincent very kindly named the Chongoni examples after me as *Artisornis metopias bensoni* (Bull. B. O. C. lv. 1935, pp. 174–176). It appears, however, that these birds are not attributable to the genus *Artisornis*. They differ from *A. m. metopias*, from the Usambura Mountains, N.E. Tanganyika Territory, in having smaller, less stout bills and longer tails, and Dr. H. Friedmann (Ibis, 1928, p. 476) states that the genus *Artisornis* differs from *Apalis* in having a very short tail and a large, very different type of bill. On the other hand, they resemble very closely an example of *Apalis bamendæ strausæ* (Boulton, Ann. Carnegie Mus. xxi. 1931, p. 53 : typ. loc. Mt. Rungwe, 5650 feet) from the type-locality, in S. Tanganyika, which has been kindly loaned by the American Museum of Natural History, and a series from Njombe in S. Tanganyika; but in the four adult birds from Nyasaland the chestnut colouring of the chin and throat is deeper and richer, and in the two adult examples from Chongoni Mountain (the southernmost records) the crown and nape are more rufous than in any of the other examples either from Nyasaland or Southern Tanganyika.

The following are some measurements (in mm.) of the specimens referred to above :—

	Locality.	Sex.	Culmen from base of skull.	Wing.	Tail.
Apalis bamendæ bensoni.	Nyasaland	Male.	13·5	53	64
	„	Female.	14	51	55·5
	„	Male.	14·5	49	55·5
	„	Female.	13·5	49	51
Apalis bamendæ strausæ.	Njombe, Southern Tanganyika.	Male.	13	50	47
	„ ..	Male.	14	52	61
	„ ..	Female.	14	49	49
	„ ..	Female.	14	49	51
	„ ..	Male.	14	51	Tail incomplete.
Artisornis metopias.	Mt. Rungwe, N.E. Tanganyika.	Male.	13	48	49·5
	„ ..	Female.	15·5	44	35
	„ ..	Male.	16	47	40
	„ ..	Female.	15·5	47	In moult.

It is clear that my birds should be classified as *Apalis bamendæ*, not *Artisornis metopias*.

Field-notes.—As Admiral Lynes and Mr. W. P. Lowe found in S. Tanganyika (J. f. O. Suppl. 1934, p. 90), Nyasaland birds appear to have no conspicuous song-calls, and I have, off and on, observed these birds continually from February to August. Nor does one often see the birds, as they keep to the forest canopy (see Moreau, Ibis, 1933, p. 27—*Artisornis metopias*, a bird of the undergrowth).

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following four notes :—

1. On *Numenius arquata suschkini* Neumann.

In the Orn. Monatsb. xxxvii. 1929, p. 76, Prof. Neumann has described this new race, saying that it is similar in plumage to *N. a. lineatus* Cuvier (=*N. a. orientalis* Brehm), but differs in its smaller size and shorter bill, and gives comparative measurements to show this. The wing measurements given overlap and can therefore be dismissed. As regards the bill, we find in measuring specimens in the British Museum collection that the bills of some males of *N. a. arquata* are well within the measurements given for the new race; and some males of *N. a. orientalis* are only one millimetre more than the maximum measurement given for *N. a. suschkini*. We are therefore unable to recognize this race.

May we say we regard it as unfortunate that the winter quarters of a bird should be designated as the type-locality; and in this instance we note that Prof. Neumann had the opportunity of designating a type from the breeding area.

2. On the Names used for the *Rhinoptilus chalcopterus* Group of Coursers.

Sclater, in the Syst. Av. Æthiop. i. 1924, p. 139, uses Neumann's *R. c. obscurus* for the race from Tanganyika Territory and Loango coast southwards, quoting 'Ibis,' 1920, p. 896, in a footnote, and making *R. albofasciatus* a synonym of *R. c. obscurus*. It is quite true that the type of *R. albofasciatus* is an immature bird, but this does not invalidate it as a name, and if the southern African bird is different

to the northern, then *R. albofasciatus* Sharpe, Bull. B. O. C. iii. 1893, p. xiv : Colenso, Natal, must be used for it, as it has priority by seventeen years over *R. c. obscurus* Neumann, O.M. xviii. 1910, p. 11 : Fort Quinpungo, Mossamedes, Portuguese West Africa. We are, however, of opinion that no races of this Courser can be recognized, and that the characters given for the southern race are only individual variations in tone of colour, and can be found in northern birds. Both names, therefore, become synonyms of *Rhinoptilus chalcopterus*.

3. On the Status of *Streptopelia fulvopectoralis* Granvik, J. f. O. 1923, Sonderheft, p. 54, pl. i. : Kendu, Kavirondo, Kenya Colony.

Through the very great kindness of Count Gyldenstolpe we have been privileged to examine in London the type-specimen of this species.

In colour-pattern, but not in colour, this specimen agrees perfectly with *Streptopelia decipiens perspicillata* Fisch. & Reichw. It is in full moult and the new feathers are brown. The under wing-coverts and axillaries are russet-brown peppered with grey ; under tail-coverts peppered russet with white edges, and tending towards grey at base ; blackish half-collar on hind neck still moulting, and would be more distinct when moult completed.

Our critical examination of this type, and careful comparison with the series of Eastern African half-collared Doves in the British Museum collection, clearly shows that *Streptopelia fulvopectoralis* is a brown or erythristic phase of *Streptopelia decipiens*, and must become a synonym of the race *S. d. perspicillata*.

On comparing this type-specimen with plate i., J. f. O. 1923, we find that this gives only a general idea of the specimen, and is lacking in essential details, *i. e.*, under tail-coverts do not show the peppered russet centres, there is too much contrast between the sides of the face and the crown, the throat shows too much white, and especially the tail is shown as having light tips only, whereas in the specimen there is an extensive apical light end of 35 to 40 mm., with a darker basal

portion and white tips, thus agreeing in tail pattern with that of the *S. decipiens* group. This type-specimen is numbered 1430, is an adult female, was collected on August 22, 1930, and the feet are given as pale reddish lilac.

It is a most interesting specimen, as colour phases in the Columbidæ in a wild state must be extremely rare, although Bannerman, Ibis, 1916, p. 11, mentions an abnormally coloured specimen of *Aplopelia s. simplex*.

It has always struck us as remarkable that no other specimen has come out of so well-known an area as the Kavirondo country, where usually *S. d. perspicillata* would be found, but the fact of its being a colour phase would account for this.

4. On the exact Type-locality of *Tympanistria tympanistria tympanistria* (Temm. & Knip).

Temminck & Knip, Pig. Colombes, p. 80, pl. 36, 1810, founded *Columba tympanistria* on a specimen collected by Levaillant, and give a reference to Tourterelle Tambourette Le Vaillant, Ois. d'Afr. vi. pl. 272. Temminck & Knip remark, " a été trouvée en Afrique par M. Le Vaillant," and " La Columbe Tambourette habite la partie meridionale de l'Afrique, vers le pays des Cafres."

Levaillant, Ois. d'Afr. vi. p. 86, pl. 272, 1808, says :—" La Tambourette habite les même canton que l'émeraudine " ; and under La Tourterelle Émeraudine, pl. 271 p. 85, says :— " La Tourterelle émeraudine est très-abondante vers les rivières du Gamtoos, du Louri et du Van-Staade. On en voit aussi beaucoup sur les bords de la petite et de la grande rivière de Poissons (wis rivière), et dans tout le pays des Cafres."

As Temminck and Knip founded the locality for their *C. tympanistria* on Levaillant, who says that La Tambourette is found in the same places as La Tourterelle Émeraudine, we can accept these localities for *T. t. tympanistria*. As priority demands that we use the first place mentioned, provided that the bird occurs, or did occur, there, we fix the exact type-locality of *Tympanistria tympanistria tympanistria* (Temm. & Knip.) as Gamtoos River, Humansdorf Division, Cape Province, South Africa.

Mr. Gregory M. Mathews sent the following change of name of the Buff-sided Fly-Robin :—

Pœcilodryas luctuosus (Pucheran).

1853. *Pardalotus luctuosus* Pucheran, Voy. Pôle Sud, Zool. vol. iii. 1853, p. 74, pl. 20, fig. 1, before Oct. 10, 1853 : Raffles Bay. This is older than

1858. *Petroica ? cerviniventris* Gould, Proc. Zool. Soc. Lond. 1857, p. 221, Jan. 12, 1858 : Victoria River, Northern Territory.

NOTICES.

The next Meeting of the Club will be held on Wednesday, April 8, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

"Remarks on the Extraordinary Gregarious Roosting of the Pied Wagtail in Commercial Glasshouses." By P. F. Bunyard.

PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXCV.

THE three-hundred-and-ninetieth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, April 8, 1936.

Chairman : Mr. G. M. MATHEWS.

Members present :—Miss C. M. ACLAND ; W. B. ALEXANDER ; D. A. BANNERMAN ; Miss P. BARCLAY-SMITH ; F. G. F. BARRINGTON ; P. F. BUNYARD ; Hon. G. L. CHARTERIS ; Miss J. M. FERRIER ; Captain C. H. B. GRANT (*Editor*) ; Lieut.-Commdr. A. M. HUGHES, R.N. ; Major H. W. HUTSON ; Dr. K. JORDAN ; Rev. F. C. R. JOURDAIN ; N. B. KINNEAR ; Miss E. P. LEACH ; Miss C. LONGFIELD ; Rear-Admiral H. LYNES ; C. W. MACKWORTH-PRAED (*Hon. Treas.*) ; Dr. P. H. MANSON-BARR ; C. A. NORRIS ; C. OLDHAM ; Miss G. RHODES ; W. L. SCLATER ; D. SETH-SMITH ; Col. R. SPARROW ; Dr. A. LANDSBOROUGH THOMSON (*Hon. Sec.*) ; B. W. TUCKER ; H. M. WALLIS ; Mrs. W. BOYD WATT ; H. WHISTLER (*Vice-Chairman*) ; H. F. WITHERBY ; C. G. M. DE WORMS.

Guests :—Miss G. HARINGTON-MORGAN ; Lieut.-Commdr. A. A. HAVERS, R.N. ; J. L. HAWKINS ; A. C. HOWARD.

Mr. P. F. Bunyard made the following remarks on the roosting of Pied Wagtails (*Motacilla alba lugubris*) in commercial glass-houses :—

For many years large numbers of Pied Wagtails have roosted in the glass-houses on the well-known nurseries of Messrs. George Mount & Sons, at Canterbury, Kent, in which large quantities of perpetual flowering carnations and roses are grown for market.

Mr. Harry Mount informs me that sometimes there have been as many as five hundred, and that they have been visiting these houses for about ten years, commencing with a few birds ; but each year the numbers have increased. The average temperature of the houses at dusk and through the night is kept at about 55° Fahrenheit ; and the ventilators are closed at dusk, after which it is impossible for the Wagtails to enter or leave.

Just before dusk a single bird arrives and flies round about the houses, calling loudly. They then commence to arrive in parties of ten to fifteen, and perch on the outside of the houses. After a rest, they enter by the ventilators and take up their positions on the steel struts and hot-water pipes. On the latter they sit in rows almost touching one another, apparently attracted by the warmth of the pipes, on which I found it just possible to hold my hands. They begin to arrive in the early autumn and disappear altogether during the spring.

A few roses have been damaged, but beyond this no appreciable harm has been caused by their presence, consequently they have not been molested, and no attempt has been made to keep them away or drive them out.

On February 1 I was able to accept a long-standing invitation to visit the nurseries, to see this remarkable phenomenon. I was joined at dusk by Mr. S. A. R. Smith of Canterbury, another keen ornithologist, and we saw the Wagtails arrive and enter the houses. Unfortunately the light was bad, and photography out of the question. We arranged with the foreman to keep the ventilators shut until our arrival at 8 A.M. on the following day. With the assistance of his men we formed a line and gently drove the birds to the end

of the block of houses until their numbers were about three hundred. We did not approach too near, as some of them commenced to dash themselves against the glass, and I found it difficult to approach them for the purpose of photography. I exposed six plates, but, owing to bad light and my amateurish handling of the camera, only one of them is really of any value, but the others are interesting from an environmental viewpoint and show the construction of the houses, which are 250 feet long by 35 feet wide, and also the position of ventilators, struts, and pipes. I exhibit the photos merely to illustrate my remarks.

Gregarious roosting of Pied Wagtails has also been recorded from Dublin and Leicester. In the latter, as with the Canterbury case, possibly they were originally attracted by the appearance of the glass, which, I understand from aviators, looks like water from a great height.

Mr. H. F. Witherby remarked that in Dublin they frequented a plane-tree in the middle of the busiest street, and at Leicester they roosted on the outside of a glass roof of a post-office building.

Dr. A. Landsborough Thomson sent the following note :—

There are also records of large gregarious roosts of *Motacilla a. alba* : some of these are to be found on trees in illuminated open spaces in the middle of German cities. See especially H. v. Törne (1933), ' Vogelzug,' iv. p. 156, and F. Goethe (1934), *ibid.* v. p. 183.

As a result of his travels in the Congo with Mr. Jack Vincent Admiral Lynes proposed the following alterations to the classification of the *Cisticolæ* *, accompanying the proposals with an exhibit.

Cisticola dambo kasai, subsp. nov.

Type in the British Museum †, reg. no. 1936.4.13.1, an adult male in Summer dress, parent of a nest of two incubated

* The type in these descriptions, in accordance with Admiral Lynes's wishes, is set in a similar manner to that of his Cisticola Review, and to his papers in the ' Bulletin,' lii. 1931, pp. 4–13, *et seq.*

† The mate of the Type will shortly be deposited in the Belgian Congo Museum, Tervueren, as the Co-type.

eggs collected by Rear-Admiral Lynes and Mr. Jack Vincent, 13 October, 1933, near Banda in the N.W. Kasai Province of the Belgian Congo, Lat. 5·7° S., Long. 19·7° E., 2400 ft. alt. : wing 53, tail 41.

The Type and Co-type are representative of a series of twenty ♂, ♀ adults collected in the same locality during the same breeding-season.

DESCRIPTION of the race (cf. *C. d. dambo* ; Bull. B. O. C. lii, 1931, p. 5.)

Size. The same.

Coloration. *Adults Summer.* Very markedly different in the following respects :—

Above, much less black (the narrower feather-centres) and much more dark buff (the broader feather-borders).

Below, the bright rusty-buff suffusions much stronger and more widespread.

Tail, the tips quite rusty-buff, no white at all.

The Winter and Juvenile dresses are not yet known.

RANGE. As yet only known to inhabit the short grass " pasture " or " dry dambo " ground in this part of the *inner* Congo basin, whereabouts are some large stretches of this kind of ground. The typical race inhabits and is equally abundant on similar ground in the *outer*, southermost, part of the Congo basin and in our recent two traverses of the southern basin we found no ground likely to be inhabited by this species in the 300 miles between Banda and *C. d. dambo*'s most northerly known range.

In behaviour *C. d. kasai* is just like *C. d. dambo*, and the four clutches of its eggs that we found contain no suggestion of geographical variation.

Cisticola pipiens congo, subsp. nov.

Type in the British Museum*, reg. no. 1936.4.13.2, an adult breeding male in Summer dress collected by Rear-

* The mate of the Type will shortly be deposited in the Belgian Congo Museum, Tervueren, as the Co-type.

Admiral Lynes and Mr. Jack Vincent, 10 Jan., 1934, at Elisabethville, S.E. Belgian Congo, 4000 ft.: wing 65, tail 60.

In Ibis, 1933, p. 30, I said that the *C. pipiens* inhabiting the Congo basin differs from the typical form of the central Angolan highland (or Benguela) plateau in size and the coloration of its Summer dress, but recommended postponing subspecific classification until the Winter dress of the Angolan bird was known. We now know from thirteen specimens taken in June 1933 that in the coloration of the Winter dress there is very little variation throughout the whole known range of the species.

But the other geographical differences are confirmed by our recent experiences in the Congo and I therefore propose subspecific recognition of the Congo aggregate under the above name.

DESCRIPTION.

Size. Smaller, thus :—

C. p. congo, ad. ♂ wing 63±3 ; tail S. 58±2, W. 66±4.
C. p. pipiens, ad ♂ wing 66±2, occ. 63 ; tail S. 63±3, W. 74±4.

Note the extremely long Winter tail of the typical race. The long tail of broad feathers is the outstanding character of form which at all seasons, alike in the field and laboratory, distinguishes this species from its nearest ally *Cisticola galactotes*.

Coloration. The adult Summer dresses of both sexes are **above,** rather more boldly mottled, and **below** rather more strongly suffused with buff than in the typical race.

RANGE. Only yet known to inhabit the southern, *outer* part of the Congo basin (Rhodesian, Belgian and Angolan territories), north to Lat. 9½° S. and south to Lat. 13° N., where, at Ndola it is by a few miles just in the Zambesi drainage.

Within this range *C. p. congo* is as common as is *C. pipiens* in the Benguela plateau. The two races are as yet separated by a gap of more than three hundred miles of country which is little known to ornithologists.

In behaviour there is no geographical variation, and a clutch of eggs taken at Elisabethville by Mr. Alfred Vincent (with parent bird) in March 1933 are very like those of the typical race described in Ibis, 1933, p. 32.

Cisticola *angusticauda* not *Apalis angusticauda*.

When reviewing the genus *Cisticola* a few years ago the bird discovered by Herr Böhm in central Tanganyika Territory and named by Professor von Reichenow *Cisticola angusticauda* was, of course, included.

Besides Böhm's field notes in Reichenow's 'Vögel Afrikas' (which suggest Cisticoline behaviour) only five specimens were available for examination, all apparently adult.

It can be seen well enough from skins that in coloration *angusticauda* is almost a replica of its near neighbour *Cisticola fulvicapilla muelleri*, but that in the shape and proportions of their remiges and rectrices the two birds differ markedly—*angusticauda*'s primaries being narrower, and rectrices longer and narrower.

Because of these differences and notwithstanding the fact that similar differences among the *Cisticolæ* are found to serve as characters of external form by which two like-coloured species can be distinguished from one another I proposed *angusticauda*'s rejection from *Cisticola*.

In our standard classification of African birds, the 'Systema Avium Æthiopicarum,' the bird is called *Apalis angusticauda*, but Mr. Sclater wisely expresses a doubt as to the correctness of the genus.

Since 1930 Willoughby Lowe, Jack Vincent and I have come to know *angusticauda* very much better, in Tanganyika Territory in 1932 and in the southern Congo two years ago.

Besides an additional thirty-three specimens from these places which show what the bird's external characters of form and coloration are like from the nestling stage onwards, we have its nest and eggs and enough personal knowledge of the bird's behaviour to compare it adequately with like knowledge of some of the *Apalis* species, including the genotype *A. thoracica*.

My conclusions are as follows :—

(*a*) *angusticauda* is as much **unlike** *Apalis thoracica* in its ways as it is in its external characters of form and coloration and is quite unnaturally placed in a genus of which *A. thoracica* is the genotype (*cf.* J. f. O. Sond. 82, 1934).

(*b*) To have rejected *angusticauda* from *Cisticola* was wrong. In its behaviour—habitat, nest and even voice—it is as remarkably **like** *Cisticola fulvicapilla* as it is like the *muelleri* race of that species in coloration.

(*c*) All evidence (within present perception) of the bird's affinities goes to show that *angusticauda* is most naturally placed—re-placed—in *Cisticola*, in which genus peculiarities of external form like *angusticauda*'s are known to occur as indications of *specificity*, and there is abundant evidence to show how often knowledge of the bird's hereditary traits of behaviour may serve to enable their morphologic characters to be given their proper value.

The following details, arranged in the style of the Cisticola Review, record what is known of *C. angusticauda* up to date.

Cisticola angusticauda Rchw., J. f. O., 1891, p. 163 ; Vog. Afr. 1905, iii. p. 566.

A species of the *C. brachyptera* group whose nearest ally is *C. fulvicapilla*.

DESCRIPTION. (cf. *C. fulvicapilla*.)

Form and **Proportions.** Very markedly different in respect of the steeply graduated tail of long narrow feathers, and the narrow outer remiges, but not otherwise.

Coloration. At all ages and seasons, almost identical throughout with that of the *muelleri* race of *C. fulvicapilla*, except that the adult head-top runs a trifle brighter shade of red, and in the Congo the back and tail are darker and the tail-spots more pronounced—as if the black pigment in the feathers of these tracts is more vigorous—than in the east of the bird's range.

Nestlings have full black tongue-spots, but the spots seem to fade out in immaturity rather earlier than is the rule in *Cisticola*.

MEASUREMENTS.

Ad. ♂. Wing 48±1, occ. 50; tail 51±3*; 1 P./2 P. av. 12/30 (40 %).

Ad. ♀. Wing 45±1, occ. 47; tail 50±3*.

Juv. ♂. 1 P./2 P. av. 14/28 (50 %).

Moults. As *C. f. muelleri*, but the pre-nuptial tail moult seems to be often imperfect (*i. e.* more like that of the South African *C. f. fulvicapilla*), and new breeding feathers come only about 3 mm. shorter than those they replace. If all the longest rectrices are renewed before breeding the tail-lengths will be shorter by 3* mm. than as given above.

Specimens examined, 28 ad. ♂, ♀; imm.; 3 juv.; 3 Pull.

Localities, representing all that is known of the **Range.**

S. Kenya Col.. Amala R., X, (Cozens & Lowe).

Tang. Terr., Tabora Distr., 3700 ft.:—Kakoma II (Böhm), Type *C. angusticauda*; Tabora VII (Emin)—Iringa, 5500 ft., XI, I, II, III (Lynes & Lowe); (not ex^{d}.) Mtiras, upper Rovuma R. (Fülleb.).

S.E. Congo. Elisabethville and 80 m. to N.E. & N.W^{d}., 4000 ft., VII, VIII, I, II (Lynes & Vincent & Maberley).

N.E. Rhodesia. Ndola (Congo border), 4100 ft., II, (Lynes & Vincent).

It will be seen that *C. angusticauda* has not yet been found within 250 miles of the nearest *C. fulvicapilla*, but that the nature of what is known of their distribution and the alikeness of their habitat both suggest the likelihood of the two species being eventually found in the same locality.

Status. At Iringa, Ndola and in the S.E. Congo, common.

BEHAVIOUR.

Habitat. Light woodland (as *C. fulvicapilla*).

Habits. So like *C. fulvicapilla* that we failed to detect any material difference even in the voice, which is exceptional among the species of *Cisticola*. The " noisy, rattling flight " recorded by Böhm (Vög. Afr.) we did not notice, but

made by so good an observer demands attention ; the more so because in this genus three of the five species (*C. cherina*, *aridula*, *textrix*, *ayresii*, and *brunnescens*), q.v. Cist. Rev., "snap" their wings in flight, suggesting a direct relation between the structure and its function.

Nest. Just like *C. fulvicapilla*.

Eggs. One full clutch of three taken in January in the Elisabethville locality are white with small Indian-red spots and freckles ; very like a common type of the eggs of *Phylloscopus trochilus* ; size, av. 14·4±·4×11·0.

Breeding season. At Iringa, Ndola and in the S.E. Congo, December to March.

Mr. F. N. Chasen sent the following note :—

Stachyris nigriceps rileyi, nom. nov. for *Stachyris nigriceps dilutus* Rob. & Kloss, Ibis, 1919, p. 584 : Dran, S. Annam. Not *Stachyris poliocephala diluta* Rob. & Kloss, Ibis, 1918, p. 587 : Taiping, Perak.

Dr. K. Jordan exhibited, on behalf of Lord Rothschild, a series of eggs, taken on Fergusson Is. by Mr. F. Shaw Mayer, of the Bird of Paradise, *Manucodia* (*Eucorax*) *comrii* Sclater, 1876. He wished to draw special attention to the great individual variability in the ground-colour and markings. The differences shown in this series go a long way to prove that the several Birds of Paradise eggs (notably those of *Paradisea rudolphi* Finsch, 1885), on which much doubt has been cast owing to their variability, may after all be correctly determined. Length and width (in mm.) of a selected series : 47·5×30 ; 46·5×29 ; 45×31 ; 42×28·5 ; 41×31 ; 41×29 ; 40·2×30·2.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following four notes :—

1. On the type-locality of *Œna capensis* (Linn.) :—

Sclater, Syst. Av. Æthiop. i. 1924, p. 171, and other authors give Cape of Good Hope.

Linnæus, Syst. Nat. 12th ed. i. 1766, p. 286, who gives Cape of Good Hope, refers only to Brisson, i. 1760, p. 120,

who gives under " La Tourterelle du Cap le Bonne, Espérance " the habitat as Senegal, sent to M. de Reamurs by M. Adanson, and has been sent by M. l'Abbé de la Caille from the Cape of Good Hope. It is not clear why Linnæus does not mention the locality Senegal ; but although Brisson gives this locality priority, we must accept that given by the author of the scientific name.

Reference to N. L. de la Caille's Journ. Hist. Voy. Cap. Bon. Esp., Paris, 1763, shows that he landed at the Cape on March 30, 1751, and left on March 8, 1753, and during these two years did not leave the Cape Peninsula. As Linnæus's Cape of Good Hope is founded on Brisson's reference to La Caille, and we know that La Caille found this species in and around Cape Town, we can fix the type-locality of *Œna capensis* (Linnæus) as Cape Peninsula, Cape Province, South Africa.

2. On the correct type-locality of *Cuculus clamosus* Latham :—

Latham, Gen. Syn. ii. Suppl. 1802, p. xxx, gives as first reference Levaillant, Voy. Afr. ii. 1790, p. 9. On referring to Levaillant we see that he obtained this Cuckoo in the country of the Gonaquais, which is situated some 90 miles east of the present town of Graaf Reinet. We therefore consider that the exact type-locality of *Cuculus clamosus* Latham should be : Cradock Division, Cape Province, South Africa.

3. On the correct type-locality of *Clamator serratus* (Sparrman) :—

Sparrman, Mus. Carls. fasc. i. pl. 3, 1786, gives " Habitat ad Promontorium Bonae Spei." As this very clearly means the Cape of Good Hope, and not the more comprehensive Cape of Good Hope Colony, we consider the exact type-locality of *Clamator serratus* (Sparrman) should be : Cape Peninsula, Cape Province, South Africa.

4. On the correct type-locality of *Clamator hypopinarus* (Cab. & Heine) :—

Cabanis & Heine, Mus. Hein. iv. 1862, p. 47, founded their name on what Levaillant (Ois. Af. v. 1806, pp. 41, 42) considered to be the young bird of his Le Coucou édolio. Under

this Cuckoo, on p. 39, Levaillant says Le Coucou édolio is found in the environs of the Cape of Good Hope, and on p. 40 gives the specific localities as Ronde-Bosch, Niuwe-Land, and Constance.

We therefore consider the exact type-locality of *Clamator hypopinarus* (Cabanis & Heine) should be : Rondebosch, Cape Peninsula, Cape Province, South Africa.

NOTICES.

The next Meeting of the Club will be held on Wednesday, May 13, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

1. The Hon. Anthony Chaplin will make some remarks on the Birds seen on Vulcan Island and in north-eastern New Guinea, and will show some slides.
2. The Rev. F. C. R. Jourdain will say something on the question, Are the Hooded and Carrion Crow species or races?

BRITISH MUSEUM
NATURAL HISTORY
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PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

BRITISH MUSEUM (NATURAL HISTORY)

No. CCCXCVI.

The three-hundred-and-ninety-first Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, May 13, 1936.

Chairman: Mr. W. L. Sclater.

Members present:—Miss C. M. Acland; E. C. Stuart Baker; F. J. F. Barrington; Major-Gen. Sir Percy Cox; A. Ezra; Miss J. M. Ferrier; Miss E. M. Godman; Col. A. E. Hamerton; Dr. E. Hopkinson; Lieut.-Commdr. A. M. Hughes; Major H. W. Hutson; Dr. K. Jordan; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; Miss C. Longfield; Dr. G. Carmichael Low; J. D. Macdonald; C. W. Mackworth-Praed (*Hon. Treas.*); Lt.-Col. H. A. F. Magrath; J. G. Mavrogordato; C. A. Norris; Dr. B. B. Rivière; Major M. H. Simonds; Dr. A. Landsborough Thomson (*Hon. Sec.*); B. W. Tucker; C. M. N. White; H. F. Witherby.

Guest of the Club:—The Hon. Anthony Chaplin.

Guests:—Capt. G. W. Browning; Mrs. Sclater; H. N. Southern.

Mr. J. D. Macdonald exhibited some Redshanks and made the following remarks :—

Size of the Webs on the Feet of Redshanks.

Monsieur J. Delacour sent in a letter on the 29th April which brings to light the fact that some Redshanks have much larger webs on the feet than is generally believed to be the case. Extracts from his letter read as follows :—

" I am sending a Redshank with webbed feet. Last year and this year a number of such webbed specimens (over 30) have been caught on the Vendée sea-shore, and local ornithologists are much excited."

" Among some 12 live birds sent last week six are normal, with no conspicuous webs between the inner and middle toes ; two are like the one I am sending ; one is more ; and two less. It seems to me that a strain of Redshanks which breeds somewhere and migrate through Vendée are showing a sudden mutation."

The inner and outer webs of the specimen sent in measure 6 and 7 mm. respectively.

We relaxed the feet and measured * the depth of the webs in some 63 museum specimens ranging in distribution from Iceland to southern Spain. They showed a remarkable range in size. There were too many birds from Britain and too few from other places to make an accurate statistical analysis of the data, but some interesting points were obtained by considering birds in breeding plumage only, and therefore probably fairly close to their breeding quarters, and by dividing these into the three recognized western European races, namely, *Tringa totanus robusta* of Iceland, *T. t. britannica* of Britain, and *T. t. totanus*, which ranges from Scandinavia down the west coast of the continent to Spain.

There were only four specimens from Iceland. The maximum size of the webs were 2·5 and 5·5 mm., but seven wintering birds from Britain increased the average to 3 and 6 mm.

Fourteen breeding specimens of *T. t. britannica* gave an average of 4 and 6·5 mm. respectively.

* Measurements were made from the apex of the web to its minimum depth, when the toes were normally expanded.

We have only three specimens of *T. t. totanus* from Norway, and their average is 4·5 and 7·5 mm. There are four birds of this race from northern France, one in April and three in May, the average size of the webs being 5 and 8 mm. M. Delacour's bird, therefore, with measurements of 6 and 8 mm., seems quite normal. We have ten birds from southern Spain which give the maximum averages of 7 and 9·5 mm.

I must point out again that there are far too few measurements on which to base accurate statistical conclusions, but from the few measurements we have been able to make there is an indication that the size of the webs in *T. totanus* is fairly small in the northern range of its breeding distribution, but that they increase considerably, not by sudden jumps but by gradual increments, towards the south, where they reach a maximum in those birds found breeding in southern Spain.

There is correlated with this increase in the size of the webs a corresponding but not proportionate increase in the length of the tarsus. The tarsus increases from an average of about 47 mm. in the Iceland birds to about 52·5 mm. in those from southern Spain. There may be other similar increases in size, but curiously enough the wings of *T. t. robusta* (according to Witherby's ' Handbook ') are slightly larger than those of *T. t. totanus*.

The sudden appearance of a mutation, therefore, is not, as far as I can see, the answer to M. Delacour's problem. The fact that one of our specimens from Le Havre, with a label date of 27. 5. 1876, has web-measurements of 6·5 and 9 mm., which corresponds quite closely with those of the birds obtained recently at Vendée, suggests that moderately large-webbed birds have been there all the time, only the fact has not been observed. The majority of what we have been accustomed to think as the normal small-webbed birds are more than likely migrants going further north.

I have indicated that this conclusion is based on far too little data, and would like to suggest that measurements of the size of the webs, preferably of nesting birds, should be obtained throughout the range of this species.

Mr. H. F. Witherby stated that M. Mountfort had informed him that M. Rapine had reported at the April meeting of the Société Ornithologique de France that eleven Redshanks caught in a net at Aiguillon-sur-Mer (Vendée) in April 1935, and the same number in March 1936, all had a well-formed web between each of the toes. M. Rapine desired to draw the attention of British ornithologists to this discovery so that they might investigate the question.

Mr. Witherby further remarked that the late Mrs. Meinertzhagen had described the webbing in the ' Practical Handbook ' as the two outer toes webbed to about the first joint and the middle and inner ones very slightly webbed at the base, and that, although he had not had an opportunity of examining a series, those British specimens which he had looked at (without relaxing the feet), as well as two of the Iceland form, appeared to fit this description.

Mr. Macdonald's remarks concerning the greater extent of web in more southern birds was most interesting, but as these appeared in other respects to be like Scandinavian birds it would be advisable to examine more of the latter than had been available. Mr. Witherby understood that M. Rapine's birds did not breed in the neighbourhood and were considered to be migrants.

Mr. N. B. Kinnear pointed out that it was necessary to relax the feet of specimens in order to observe the character, and that the measurements of the webs were affected by the extent to which the toes were spread.

The Hon. Anthony Chaplin showed a film illustrating the recent voyage of Lord Moyne's yacht to the Andaman Islands, Ceylon, Borneo, and New Guinea, and made remarks regarding the birds seen.

Mr. J. D. Mavrogordato exhibited a clutch of three eggs of the Goshawk (*Accipiter gentilis*) laid in captivity in Great Britain.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following two notes :—

(1) On Cuculus clamosus Latham and Cuculus jacksoni Sharpe.

For the views advanced about these Cuckoos see Bannerman, Bds. Trop. W. Afr. iii. p. 89, 1933 *, who regards *Cuculus gabonensis* Lafresnaye and *Cuculus jacksoni* Sharpe as races of *Cuculus clamosus*.

Sclater, Syst. Av. Æthiop. i. 1924, pp. 179, 180, treats them as species, but considers *Cuculus mabiræ* van Someren, Bull. B. O. C. xxxv. 1915, p. 116 : Kasala Forest, Uganda, to be a race of *C. gabonensis*. Bates, Handb. Bds. West Afr. 1930, p. 194, considers *C. gabonensis* to be a race of *C. clamosus*, and under *C. c. clamosus*, on p. 195, remarks on the gradations of this Cuckoo, and considers that all these gradations belong to *C. c. clamosus*.

That *Cuculus solitarius* Stephens, in Shaw's Gen. Zool. ix. pl. xviii. 1815, p. 84 : Eastern Cape Province, has nothing to do with either *C. clamosus*, *C. gabonensis*, or *C. jacksoni* is not only shown by the different coloured upper parts and voice, but by its definitely smaller bill. Moreover, the young bird of *C. solitarius* is barred below, whereas the young bird of *C. clamosus*, *C. gabonensis*, and *C. jacksoni* is wholly black.

We agree with Bates that all those birds showing individual variations from " barred on the underside with chestnut on the crop, to wholly black birds " all belong to *C. clamosus*, and we base this conclusion on the fact that such odd-coloured specimens are found in South Africa along with the black bird, and that odd-coloured specimens found elsewhere in Africa agree with these South African specimens.

It is therefore clear that *C. clamosus* in its typical locality is subject to considerable individual variation, these variations not being stages of immature dress as suggested by some authors.

Sharpe founded his *Cuculus jacksoni* (Bull. B. O. C. xiii. 1902, p. 7 : Toro, Uganda, type in British Museum) on an odd-coloured specimen, as did van Someren his *C. mabiræ* ; and therefore these names become synonyms of *C. clamosus*.

* Also Ibis, 1921, p. 92.

We now know that the black phase of *C. clamosus* breeds as far north as Abyssinia *, and probably over the whole of its range, and therefore within the area occupied by *C. gabonensis*.

C. clamosus breeds in South Africa from October to March, and moves northward between April and September, thus augmenting the resident birds in other parts of Africa during these months.

The names and distribution of this difficult group of Cuckoos is as follows :—

Cuculus clamosus Latham.

Cuculus clamosus Latham, Gen. Syn. ii. Suppl. 1802, p. xxx : Cradock Division, Cape Province, South Africa ; of which *C. chalybæus* Heuglin, J. f. O. 1862, p. 34 : Ain Saba, northern Abyssinia ; *C. jacksoni* Sharpe, and *C. mabiræ* Van Som. are synonyms.

Distribution.—From Gambia and Abyssinia southwards to Cape Province.

Cuculus gabonensis Lafresnaye.

Cuculus gabonensis Lafresnaye, Rev. Mag. Zool. 1853, p. 60 : Gabon, West Africa.

Distribution.—Cameron to Gabon and Landana, east to Uelle River, northern Belgian Congo.

(2) On the status of Coccystes albonotatus Shelley, P. Z. S. 1881, p. 594 : Usambara Hills, northern Tanganyika Territory ; and Coccystes caroli Norman, Ibis, 1888, p. 407 : Danger River, Gabon, West Africa.

Shelley compared his bird with *Clamator serratus* Sparrman, since when it has been considered a race of that species.

Norman compared his bird with both *Clamator jacobinus* and *Clamator cafer*, and notes the extraordinary length of the tail. Sclater, Syst. Av. Æthiop. i. 1924, p. 181, treats it as a species, and Bannerman, Bds. Trop. W. Afr. iii. 1933, p. 107, considers it a race of *C. jacobinus* Boddaert.

* Ibis, 1935, p. 310,.

The types of both *C. albonotatus* and *C. caroli* are in the British Museum, and our very careful examination of these shows that the one has nothing to do with *C. serratus* and the other nothing to do with *C. jacobinus*, and that both are really *C. cafer* ; *C. albonotatus* being a black phase of *Clamator cafer* (Lichtenstein) * and *C. caroli* a specimen of *C. cafer* with rather less markings on the throat and chest than usual.

It has been accepted without question that *Clamator cafer* has considerable individual variation, from birds with plain buffy white underparts having the black streaks confined to the throat and upper chest (see spec. Brit. Mus. reg. no. 1915.12.24.452) to birds having almost black throats (see specs. Brit. Mus. reg. no. 1903.4.20.48 ; 1923.8.7.7068 ; 1933.7.13.17) and with densely streaked and dusky underparts from chin to under tail-coverts (see specs. Brit. Mus. reg. no. 1900.2.27.13 ; and 1889.6.25.142).

Of the five specimens named *C. albonotatus* in the British Museum collection, one from Takaungu (Brit. Mus. reg. no. 1903.8.1.4) has the under tail-coverts and belly-feathers agreeing perfectly with a specimen of *C. cafer* from Pangani River (Brit. Mus. reg. no. 1889.6.25.142) ; another from Takaungu (Brit. Mus. reg. no. 1903.8.1.5) and one from Malinde (Brit. Mus. reg. no. 1923.8.7.7065) have light edges to the feathers of the belly and under tail-coverts ; the type (Brit. Mus. reg. no. 1889.6.25.141) has distinct light tips to the under tail-coverts, and one from Mombasa (Brit. Mus. reg. no. 1881.5.20.2) has only a faint indication of light tips to the under tail-coverts. We therefore see that the individual variation of *Clamator cafer* ranges from birds with very light underparts (type of *C. caroli*) to a melanistic phase (type of *C. albonotatus*), but retains in all specimens the white patch in the wings, the white spots on the tips of the tail-feathers, and some light edges to the under tail-coverts and belly-feathers. As regards size and measurements we find that the type of *C. caroli* and the five specimens of *C. albonotatus* agree perfectly in size, length of bill, and colour of upper

* Since coming to the above conclusions we have discovered that Stresemann (J. f. O. 1924, p. 82) considers *C. albonotatus* Shelley to be a melanistic mutant of *C. cafer* (Licht.).

parts with specimens of *C. cafer*, and also agree with that species in wing- and tail-measurements as follows :—

	Sex.	Wing.	Tail.	
		mm.	mm.	
C. cafer	♂	164–190	210–239	(thirty-seven specimens).
	♀	165–186	204–235	(twenty-five ,,).
	?	167–186	208–236	(twenty-six ,,).
Type, *C. caroli*	?	169	220	
,, *C. albonotatus.*	?	169	219	
C. albonotatus	♀	170	214–215	(two specimens).
	?	162–163	195–205	(,, ,,).

So far as our present knowledge goes the melanistic form is restricted to an area in Kenya Colony and northern Tanganyika Territory from Lamu to the Pangani River ; but there is a young bird from Tabati, N.W. Cameroon (Brit. Mus. reg. no. 1922.11.25.23), assuming adult dress, which has some black feathers on the lower abdomen.

Both *Coccystes albonotatus* Shelley and *Coccystes caroli* Norman thus become synonyms of *Clamator cafer* (A. Lichtenstein), Cat. rer. rar. Hamb. 1793, p. 14 : Eastern Cape Province.

Mr. C. M. N. White sent the following notes on the names and subspecies of *Petroica phœnicea* Gould and *Petroica rodinogaster* Drapiez :—

Mathews (Bds. Australia, viii. p. 97) uses *Muscicapa chrysoptera* Quoy & Gaimard (Voy. de l'Astrol. Zool. i. p. 177, 1830 : Hobart) for the bird previously known as *Petroica phœnicea* Gould (Syn. Bds. Austr. pt. i. pl. vii. 1837 : New South Wales). Later the Australian Check-List placed *M. chrysoptera* as a synonym of *Petroica rodinogaster* Drapiez, and Mathews followed this in Systema Av. Austral.

I have failed to discover any published explanation for these changes, and have re-examined the question. Firstly, M. Berlioz has kindly informed me that the type of *M. chrysoptera* is not in the Paris Museum, and was probably never received there.

Quoy and Gaimard lay great stress in both Latin and French diagnoses upon the partially white outer tail-feathers, a character quite appropriate in *phœnicea*, but hardly so in *rodinogaster*. Wing-bands described as " vitta aurantia "

and "bandes d'un roux jaunâtre" appear more like *rodinogaster*, as also does the plate. But the bird described is quite clearly a juvenile with whitish streaks on the upper surface, and juveniles of *phœnicea* examined have the wing-bands quite rufous and not largely white as in adults. In my opinion the colour of the tail must be regarded as conclusive, since the wing-bands clearly give no help, and it follows that *Petroica phœnicea* must be known as *Petroica chrysoptera*. *Littlera phœnicea tasmanica* Mathews, Austral. Av. Rec. v. p. 5, 1922, must become a synonym.

I have also studied the available material to discover whether Gould's name, or any of the proposed forms, can be separated, and I fail to find any of the supposed characters. The only variation in colour seems due to wear, and the size of the frontal spot is clearly only due to individual variation and not geographical.

Twenty-three males from Tasmania, Victoria, Eastern South Australia, New South Wales, have wings 78–82, once 77 mm. Twenty females have wings 76–79, once 75 mm. There seems to be no difference between females from various localities and *Petroica phœnicea* Gould, *Petroica chrysoptera addenda* Mathews, Austral. Av. Rec. i. p. 89, 1912: Goulburn, New South Wales, and *Petroica phœnicea albicans* Mathews, Nov. Zool. xviii. p. 304, 1912: Bayswater, Victoria, must become synonyms.

I have also examined the material in the British Museum of *Petroica rodinogaster* (*Saxicola rodinogaster* Drapiez, Ann. Gen. Sc. Phys. Brux. ii. p. 341, 1819: Maria Island, Tasmania). As the series available was not large, Mr. Mack has kindly furnished me with notes upon the more considerable series in the Australian National Museum. It seems evident that the characters ascribed to *Petroica rodinogaster inexpectata* Mathews (Nov. Zool. xviii. p. 304, 1912: Gippsland) do not exist, and unless more material of females and juveniles reveals other characters the race must be rejected.

The distribution of *Petroica rodinogaster* should be:— Mountainous areas of Tasmania, King Island, and Southern and Eastern Victoria. Records from South Australia seem due to error or loose localization.

NOTICES.

The next Meeting of the Club will be held on Wednesday, June 10, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

Members who wish to make any communication at the next Meeting of the Club should give notice to the Editor, Capt. C. H. B. Grant, 58a Ennismore Gardens, Princes Gate, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

Mr. G. M. Turner will show a film of the Birds of Stewart Island, southern New Zealand.

Mr. F. J. F. Barrington will give an account of a trip to Tunis.

BRITISH MUSEUM (NATURAL HISTORY)
ZOOLOGY
E.A. MAY 1936
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXCVII.

The three-hundred-and-ninety-second Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, June 10, 1936.

Chairman : Mr. G. M. Mathews.

Members present :—Miss P. Barclay-Smith ; F. J. F. Barrington ; Brig.-Gen. R. M. Betham ; Hon. G. L. Charteris ; Maj.-Gen. Sir Percy Z. Cox ; A. Ezra ; Miss J. M. Ferrier ; Capt. C. H. B. Grant (*Editor*) ; Dr. J. M. Harrison ; P. A. D. Hollom ; Dr. E. Hopkinson ; Lieut.-Commdr. A. M. Hughes ; Major H. P. W. Hutson ; N. B. Kinnear ; Miss E. P. Leach ; Dr. G. Carmichael Low ; Dr. P. R. Lowe ; C. W. Mackworth-Praed (*Hon. Treas.*) ; J. G. Mavrogordato ; Colonel R. Meinertzhagen ; T. H. Newman ; E. M. Nicholson ; C. A. Norris ; C. Oldham ; D. Seth-Smith ; Dr. A. Landsborough Thomson (*Hon. Sec.*) ; B. W. Tucker ; H. W. Waite ; H. Whistler ; H. F. Witherby.

Guest of the Club :—George M. Turner.

Guests :—A. G. Bennett ; Miss Theresa Clay ; Dr. G. C. A. Junge ; R. E. Moreau ; A. D. Simms.

Mr. G. M. Turner, who was a guest of the Club, showed films, with a running commentary, of the Mutton-Bird of New Zealand, giving the life-history and the Maori industry of salting and packing the young birds; also of the many other birds inhabiting and breeding on Stewart Island.

These very excellent films and Mr. Turner's commentary were much appreciated.

Mr. G. L. Bates sent the following description of a new race of Lark from Arabia :—

Calandrella blanfordi philbyi, subsp. nov.

Description.—Compared with *Calandrella b. blanfordi* (*Tephrocorys blanfordi* Shelley : Senafé, Eritrea) this new Arabian race is darker and more inclined to greyish, and has the rufous of the head of a deeper shade, the ear-coverts darker, and the head more distinctly dark-streaked ; it is also larger.

Type.—Collected by H. St. J. B. Philby (no. 743), 'Ashaira (desert), January 13, 1935, ♂ (testes large).—British Museum reg. no. 1935.1.5.4.

Measurements of Type.—Wing 86 mm., tail 52, tarsus 19, bill from skull 13.

Remarks.—Three more specimens of this Lark were received recently at the British Museum, shot by Mr. Philby, February 23, 1936, on Rakba plain, north-east of Mecca, not far from the place ('Ashaira) where he got the first one (the type). The altitude of this area is about 4000 feet. The wings of the four specimens, all males, measure 85–88 mm. (as against 81·5–84 in three reliably sexed males from Somaliland).

Calandrella blanfordi should not be considered a race of *C. brachydactila*, differing from it not only in colour, but in smaller size and longer bill and shorter tail in proportion to wing-length. From *Tephrocorys c. cinerea*, with the Abyssinian race of which, *T. c. ruficeps*, it was first compared, it differs greatly in the colouring and in having the claw of the hind toe not so long and straight as that. While *blanfordi* goes well in the genus *Calandrella*, *Tephrocorys* may perhaps be

kept as a genus separate from that on account of its brighter coloration and more completely Lark-like hind claw.

Mr. Bates also sent the following note on the occurrence of *Accipiter brevipes* (*Astur brevipes* Severtzoff) in Arabia :—

A specimen of the Levant Sparrow-Hawk is among the bird-skins recently sent to the British Museum by Mr. Philby. It was shot at Hadda in Wadi Fatima, between Jidda and Mecca, on January 16, 1936. This species has never before been obtained farther south than the vicinity of Cairo, Sinai, and south-western Persia. But when J. C. Phillips got four specimens of it at Aqaba in April 1914 he saw a very large flock of birds apparently of this species flying north on migration, and thought they must have come from Arabia. (See 'The Auk,' 1915, p. 282.)

A. badius sphenurus, found in south-western Arabia as well as in Africa, is very similar to *A. brevipes*, but distinguished by much smaller size as well as by different wing-formula. Hartert rightly distinguishes *A. brevipes* from all forms of *A. badius* by longer second remex and shorter fifth, the fifth always falling much short of the tip of the wing. For this reason, and because according to Menzbier *A. brevipes* breeds in the same region as *A. badius cenchroides*, Hartert keeps them as separate species (not calling this form *A. badius brevipes*). There seems to be another constant difference, in that, when specimens of *A. brevipes* are compared with any race of *A. badius* of about equal size, the feet of *A. brevipes* are seen to be smaller, with shorter toes and claws.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following three notes :—

1. On the Movements of the Lesser Cuckoo during the Non-breeding Season.

Sclater, Syst. Av. Æthiop. i. 1924, p. 179, records *Cuculus poliocephalus rochii* Hartlaub (Proc. Zool. Soc. 1862, p. 224 : Madagascar) from Lamu, Kenya Colony ; and Durban, Natal, South Africa. As the British Museum has recently acquired from Mr. Moreau and Mr. Vincent seven more specimens of this

bird from northern Tanganyika Territory and the Mozambique Province of Portuguese East Africa, Mr. Kinnear and ourselves have examined and measured a series of *Cuculus poliocephalus* as follows :—

	Sex.	Wing.	Tail.
		mm.	mm.
Japan :	♂....	157–162	128–132
	♀....	156–160	130–133
India :	♂....	150–157	131–138
	♀....	148–159 (one 169)	124–139 (one 141)
E. Africa :	♂....	141	127
	♀....	148–152	124–135
Madagascar :	♂....	162–174	140–156
	♀....	152–162	134–140 (one 130)

Five males and three females from Japan ; ten males and twelve females from India ; one male and five females from East Africa ; and nine males and two females from Madagascar.

There is no colour-character by which any race can be distinguished, and, although the measurements of the females overlap, in the males we have a difference in wing-measurement, and on this character the Madagascar race may be retained, *i. e.*, 162–174 against 141–162 mm.

What our examination does show is that the race which occurs in Eastern Africa is *Cuculus poliocephalus poliocephalus* (Latham, Ind. Orn. 1790, p. 214 : India, restricted type-loc. Srinagar, Kashmir, India), between October and April on migration from Asia in the non-breeding season.

Cuculus poliocephalus rochii is, therefore, a resident race in Madagascar, having, according to Delacour (Ois. et la Rev. Franç. d'Orn. xi. 1932, p. 44), a local migration from the east to the west of that island during the rains (*i. e.*, November to April), and does not occur on the mainland of Africa.

Nestlings and young specimens of *C. p. rochii* in the British Museum collection are dated March and April, and are from the high plateau country in east-central Madagascar.

C. p. rochii is therefore breeding in Madagascar (October to April) at the time *C. p. poliocephalus* is visiting Eastern Africa in the non-breeding season.

See also the Rev. W. Deans Cowan, Proc. Roy. Phys. Soc. Edinburgh, 1882, p. 142.

2. On the exact Type-locality of *Corythæola cristata cristata* (Vieillot).

The general locality of Africa is given in the Syst. Av. Æthiop. i. 1924, p. 195. We cannot find that any author has fixed a more definite type-locality since Sclater's work was published.

The earliest references to this bird are as follows :—

1806. Le Touraco Géant, Levaillant, Hist. Nat. Prom. etc. 1806, p. 36, pl. 19 : no locality.

1816. *Musophaga cristata* Vieillot, Analyse, 1816, p. 68 : Africa.

1823. *Musophaga gigantea* Vieillot, Enc. Méth. 1823, p. 1295 : Africa.

1823. Blue Curassow Latham, Gen. Hist. Bds. viii. 1823, p. 156 : Sierra Leona.

Latham is the first author to give a definite locality, and we can therefore fix the exact type-locality of *Corythæola cristata cristata* Vieillot as Sierra Leone, West Africa.

3. On the original Reference and Type-locality of *Corythaixoides leucogaster* (Rüppell).

In the Syst. Av. Æthiop. i. 1924, p. 196, Sclater gives a reference to Rüppell, Mus. Senck. iii. 1842, p. 127 ; and in the Proc. Zool. Soc. 1842, p. 9, we also find this name published as new. The exact date of publication of the Mus. Senck. Abh. iii. (2) 1842 is not known, but that part (January 11) of the Proc. Zool. Soc. of 1842 in which the name of this bird occurs was not published until June of that year (see Sherborne, Ind. Anim. H–L, 1927, p. 3517). In the Proc. Zool. Soc. on p. 8 we find that a " memoir " was received and read. In the Mus. Senck. Abh. the name is given as *Chizarhis leucogaster* (Rüppell), and there is also a full description.

Confusion has been caused by the unfortunate publication of the original description in different publications in the same year; but is seems clear that the "memoir" refers to the article published in the Mus. Senck. Abh., and that this article was published before June 1842.

As regards the type-locality, in the Proc. Zool. Soc. Abyssinia only is given, but in the Mus. Senck. Abh. Rüppell says southern Abyssinian Provinces. The Southern Abyssinian Provinces in Rüppell's time is in that part now known as Central Abyssinia. We can therefore fix the type-locality of *Corythaixoides leucogaster* (Rüppell) as Central Abyssinia.

Mr. Gregory M. Mathews sent the following remarks on Fork-tailed Petrels :—

Cymochorea melania matsudariæ (Kuroda), Ibis, 1922, p. 311 : Sagami Bay, Japan.

Dr. N. Kuroda of Tokyo has sent over a skin of his new form of Black Fork-tailed Petrel from the Bonin Islands, with measurements of three skins as follows :—

Sex.	Wing.	Culmen.	Tail.	Tarsus.	Middle toe without claw.	Middle toe with claw.	Tail forked
♀ ..	194	17·5	103	26·5	23	27	36
♀ ..	183	17·5	100·5	26	21·5	25·5	31
♀ ..	186	18·5	98	27·5	23·5	27·5	28

The first of these is from San Alessandro, March 20, 1925, in the Volcano Islands, the other two from the Bonins, June 1935. The average measurements of five males and three females are practically the same, except that the wing of the female is slightly longer.

The form *Cymochorea melania matsudariæ* breeds abundantly on Kitaiwo-jima (=San Alessandro), Volcano Islands.

Another form of the same genus, *C. owstoni*, breeds on Torishima, in the Seven Islands of Izu, South of Tokyo. This must not be confused with Minami-Torishima, which is Marcus Island.

Corrigendum to Volume LVI.

P. 85, line 35, for *Rhyncops albicollis* read *Rynchops albicollis.*

NOTICES.

The next Meeting of the Club will be held on Wednesday, October 14, 1936, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Dr. A. Landsborough Thomson, 16 Tregunter Road, S.W. 10, on the post-card sent out before the Meeting.

ANNUAL GENERAL MEETING.

This will also be held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, October 14, 1936, at 6.15 p.m. An Agenda and Balance Sheet will be issued in September.

Members who wish to make any communication at the next Meeting of the Club in October should give notice to the Editor, Capt. C. H. B. Grant, at 58a Ennismore Gardens, S.W. 7. The titles of their contributions will then appear on the Agenda published before the Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

INDEX.

[Names of new species and subspecies are indicated by clarendon type under the generic entry only; vernacular, or common, names are shown in ordinary type.]

Acanthis cannabina cannabina, 32.
Accipiter badius, 131.
—— —— *brevipes*, 131.
—— —— *cenchroides*, 131.
—— —— *sphenurus*, 131.
—— *brevipes* 131.
—— *gentilis*, 122.
Acridotheres tristis tristis, 82.
Acrocephalus arundinaceus arundinaceus, 70.
—— *schœnobænus*, 31.
—— *scirpaceus scirpaceus*, 29.
acuta tzitzihoa, Anas, 81.
Adamastor, 47.
addenda, Petroica chrysoptera, 127.
ægyptius, Milvus migrans, 86.
æquinoctialis, Procellaria, 48.
aereus, Ceuthmochares aereus, 34.
—— *flavirostris, Ceuthmochares*, 34.
Aëronautes saxatalis saxatalis, 81.
æthereus, Phaëthon æthereus, 82.
afer, Eurystomus, 12.
affinis heuglini, Larus, 34.
—— *taimyrensis, Larus*, 34.
africanus hartingi, Rhinoptilus, 72, 73.
Agelaioides badius, 89, 90.
Agelaius phœniceus phœniceus, 79.
alba, Egretta, 84.
—— *lugubris, Motacilla*, 108.
——, *Motacilla*, 86.
——, —— *alba*, 109.
Albatross, 47.
——, Black-browed, 82.
——, Black-footed, 81.
——, Grey-mantled, 82.
——, Light, 82.
——, Sooty, 49.
Albatross, Wandering, 82.
albicans, Petroica phœnicea, 127.
albicauda kivuensis, Erannornis, 11.
albiceps, Psalidoprocne, 12.
albicollis Rynchops, 85, 134.
albigularis, Callene, 18.
albiventris, Cinnyris, 18.
albofasciatus, Rhinoptilus, 103, 104.
albonotatus, Trochocercus, 12.
——, *Coccystes*, 124, 125, 126.
albus egretta, Casmerodius, 80.
Alca impennis, 42.
Alecthelia, 58.
—— *lineata*, 58.
alecto nitida, Monarcha, 39.
Alethe macclouniei macclouniei, 100.
—— —— **njombe,** subsp. nov., 100.
Alseonax cinereus kikuyuensis, 19.
alticola, Apalis, 11, 18.
amani, Dioptrornis, 19.
——, *Dioptrornis fischeri*, 19.
——, *Phyllastrephus orostruthus*, 16.
ambiguus, Haliastur indus, 85.
americana, Fulica americana, 79.
Ammomanes deserti hijazensis, subsp. nov., 8.
—— *deserti samharensis*, 8.
amydrus, Artamus leucorhynchus, 85.
Anas acuta tzitzihoa, 81.
—— *platyrhynchos platyrhynchos*, 79.
angusticauda, Apalis, 112, 113.
——, *Cisticola*, 112, 113, 114.
ankaræ, Galerida cristata, 57, 58.
Anous (Megalopterus) minutus, 84.

Anous stolidus antelius, 84.
—— —— *unicolor*, 82.
antelius, Anous stolidus, 84.
——, *Larus*, 28, 29.
——, —— *argentatus*, 53.
——, —— *fuscus*, 33, 34, 50, 51, 52.
Anthreptes, 18.
—— **pallidigaster,** sp. nov., 17.
Anthus spinoletta kleinschmidti, 55.
—— —— **meinertzhageni,** subsp. nov., 55.
—— —— *petrosus*, 55.
antiquus, Synthliboramphus, 87.
Apalis, 102, 112.
—— *alticola*, 11, 18.
—— *angusticauda*, 112, 113.
—— *bamendæ*, 103.
—— —— *bensoni*, 101, 102.
—— —— *straussæ*, 102.
—— *thoracica*, 112, 113.
—— —— *griseiceps*, 11, 18.
Aplopelia simplex simplex, 105.
apoda, Paradisea, 64.
apus ? subsp., *Micropus*, 86.
Aquila chrysaëtos canadensis, 80.
Ardea herodias herodias, 81.
argentatus antelius, Larus, 53.
—— *atlantis, Larus*, 53.
—— *cachinnans, Larus*, 53.
—— *heuglini, Larus*, 33.
——, *Larus*, 27, 28, 29, 33, 51, 52.
——, —— *argentatus*, 52, 53, 79.
——, —— *fuscus*, 27.
—— *michahellesii, Larus*, 53.
—— *mongolicus, Larus*, 53.
—— *ponticus, Larus*, 53.
—— *smithsonianus, Larus*, 79.
—— *taimyrensis, Larus*, 53.
—— *vegæ, Larus*, 53.
argenteus, Larus, 27.
aridula, Cisticola, 114.
ariel, Fregata, 84.
Arizelocichla nigriceps nigriceps, 11.
arquata lineatus, Numenius, 103.
——, *Numenius arquata*, 103.
—— *orientalis, Numenius*, 103.
—— *suschkini, Numenius*, 103.
Artamus leucorhynchus amydrus, 85.
Artisornis, 102.
—— *metopias*, 102, 103.
—— —— *bensoni*, 102.
—— —— *metopias*, 102.
aruensis, Monarcha aruensis, 38.
——, —— *chrysomela*, 38, 39.
arundinaceus, Acrocephalus arundinaceus, 70.
arvensis, Sicalis, 89.
asiatica mearnsi, Melopelia, 80.
assimilis lherminieri, Puffinus, 79.
Astur brevipes, 131.
ater, Molothrus ater, 80.
atlantis, Larus argentatus, 53.
atrata, Chenopis, 83.
atricapillus septentrionalis, Penthestes, 80.
atricilla, Larus, 79.
aucklandica, Nesonetta, 20.
Auk, 88.
——, Great, 42.
aura septentrionalis, Cathartes, 81.
australis, Cryptospiza, 101.
——, —— *reichenovii*, 101.
——, —— *salvadorii*, 100, 101.
ayresii, Cisticola, 114.

badius, Accipiter, 131.
——, *Agelaiodes*, 89, 90.
—— *brevipes, Accipiter*, 131.
—— *cenchroides, Accipiter*, 131.
—— *sphenurus, Accipiter*, 131.
bamendæ, Apalis, 103.
—— *bensoni, Apalis*, 101, 102.
—— *straussæ, Apalis*, 102.
Barbet, 13.
bassana, Sula, 79.
batesi, Canirallus oculeus, 34.
Bee-eater, 84, 85.
——, Little, 9, 10.
bengalensis, Pseudogyps, 85.
bensoni, Apalis bamendæ, 101, 102.
——, *Artisornis metopias*, 102.
bergii poliocerca, Sterna, 84.
Bessonornis grotei, 12, 18.
bewickii, Totanus, 5.
——, *Tringa*, 5.
——, —— *totanus*, 5.
Bhringa remifer peracensis, 85.
biarmicus, Panurus biarmicus, 76.
—— ? subsp., *Falco*, 86.
biludschicus, Merops orientalis, 9.
bimaculata, Melanocorypha, 35, 36.
—— *rufescens, Melanocorypha*, 36.
Bird, Mutton-, 130.
bivittatus, Trochocercus, 12.
Blackbird, 68.
——, Red-shouldered, 79.
Black Cock, 23.
blanfordi, Calandrella, 130.
——, —— *blanfordi*, 130.
—— *philbyi, Calandrella*, 130.
——, *Tephrocorys*, 130.
Bluethroat, 97.
bolivianus, Pitangus, 89.
bonariensis melanogyna, Molothrus, 88.

bonariensis, Molothrus bonariensis, 88, 89, 90.
Booby, Blue-faced, 84.
——, Brown, 86.
——, Red-footed, 81, 82, 86.
borealis calurus, Buteo, 81.
——, *Puffinus kuhlii*, 79.
Bower Bird, Satin, 83.
brachydactila, Calandrella, 130.
brachyptera, Cisticola, 113.
brachyrhynchos, Corvus brachyrhynchos, 79.
Brachyspiza capensis, 89.
brachyura, Galerida cristata, 56, 57.
Brambling, 97.
Branta ruficollis, 19.
brevipes, Accipiter, 131.
——, —— *badius*, 131.
——, *Astur*, 131.
——, *Tringa*, 85.
britannica, Tringa totanus, 5, 120.
britannicus, Larus fuscus, 51, 52.
brunnescens, Cisticola, 114.
Bubulcus ibis coromandus, 85.
—— *ibis ibis*, 86.
Bulbul, Green, 17.
——, Indian Red-vented, 82.
bulleri, Puffinus, 82.
Bulweria, 47.
Bunting, Cirl, 97.
——, Corn-, 70.
——, Lap-, 7.
——, Lark, 81.
——, Ortolan, 97.
——, Reed-, 32.
——, Rustic, 7.
——, Snow-, 7, 69.
Buteo borealis calurus, 81.
Buzzard, Honey, 7.
——, Turkey, 81.
——, Zimmerman's, 6.

cachinnans, Larus, 33, 86.
——, —— *argentatus*, 53.
cærulescens, Chen, 19.
cæruleus, Elanus, 12.
cafer, Clamator, 124, 125, 126.
——, *Molpastes cafer*, 82.
Calamonastes fasciolatus, 72.
—— —— *stierlingi*, 72.
—— *simplex*, 72.
—— —— **neglectus**, subsp. nov., 71.
—— —— *simplex*, 71.
—— —— *undosus*, 71.
Calamospiza melanocorys, 81.
calandra, Emberiza calandra, 70.
——, *Melanocorypha*, 36.
Calandrella, 130.
—— *blanfordi blanfordi*, 130.
—— —— **philbyi**, subsp. nov., 130.
—— *brachydactila*, 130.
caleyi, Petrochelidon nigricans, 91.
californica, Lophortyx californica, 81.
californicus, Pelecanus occidentalis, 81.
Callene albigularis, 18.
calurus, Buteo borealis, 81.
Campephaga quiscalina münzneri, 19.
canadensis, Aquila chrysaëtos, 80.
canagica, Philacte, 19.
Canirallus oculeus batesi, 34.
—— —— *oculeus*, 34.
cannabina, Acanthis cannabina, 32.
canorus, Cuculus, 29.
cantillans inornatus, Sylvia, 76.
capense, Daption, 82.
capensis, Brachyspiza, 89.
——, *Œna*, 115, 116.
Caprimulgus nigriscapularis, 62.
carbo, Phalacrocorax carbo, 79.
caroli, Coccystes, 124, 125, 126.
carolinensis, Pandion haliætus, 80.
——, *Zenaidura macroura*, 80.
caryocatactes, Nucifraga caryocatactes, 50.
Casmerodius albus egretta, 80.
caspica, Motacilla, 98, 99.
——, —— *cinerea*, 98.
castanea cinnamoventris, Sitta, 71.
—— *tonkinensis, Sitta*, 71.
Cathartes aura septentrionalis, 81.
Catoptrophorus semipalmatus inornatus, 81.
caucasica, Galerida cristata, 57.
cauta, Diomedella, 45.
——, *Thalassogeron*, 45.
cenchroides, Accipiter badius, 131.
cerulea nebouxi, Procelsterna, 82.
cerviniventris ?, *Petroica*, 106.
Ceuthmochares, 34.
—— *aereus aereus*, 34.
—— —— *flavirostris*, 34.
Chætura pelagica, 80–81.
Chaffinch, 6, 7, 86.
chalcopterus obscurus, Rhinoptilus, 103, 104.
——, *Rhinoptilus*, 103, 104.
chalybæus, Cuculus, 124.
Chen cærulescens, 19.
—— *hyperborea*, 19.
Chenopis atrata, 83.
cherina, Cisticola, 114.
Chettusia crassirostris, 92–93.

Chickadee, Long-tailed, 80.
Chizarhis leucogaster, 133.
Chlidonias nigra surinamensis, 80.
Chloris chloris chloris, 32.
chrysaëtos canadensis, Aquila, 80.
chrysomela aruensis, Monarcha, 38, 39.
chrysomela, Monarcha, 38.
—— *prærepta, Monarcha*, 38.
chrysoptera addenda, Petroica, 127.
——, *Muscicapa*, 126.
——, *Petroica*, 127.
Cicinnurus regius, 65.
cinerea caspica, Motacilla, 98.
——, *Motacilla*, 98.
—— *ruficeps, Tephrocorys*, 130.
——, *Tephrocorys cinerea*, 130.
cinereus kikuyuensis, Alseonax, 19.
cinnamomina, Galerida cristata, 57.
cinnamoventris, Sitta castanea, 71.
Cinnyris albiventris, 18.
—— *mediocris mediocris*, 12.
Circus hudsonius, 80.
Cisticola, 112, 113, 114.
—— *angusticauda*, 112, 113, 114.
—— *aridula*, 114.
—— *ayresii*, 114.
—— *brachyptera*, 113.
—— *brunnescens*, 114.
—— *cherina*, 114.
—— *dambo dambo*, 110.
—— —— **kasai,** subsp. nov., 109, 110.
—— *fulvicapilla*, 113, 114, 115.
—— —— *fulvicapilla*, 114.
—— —— *muelleri*, 112, 113, 114.
—— *galactotes*, 111.
—— *hunteri prinioides*, 12.
—— **pipiens congo,** subsp. nov., 110, 111.
—— —— *pipiens*, 111.
—— *textrix*, 114.
Clamator cafer, 124, 125, 126.
—— *glandarius*, 31, 78.
—— *hypopinarus*, 116, 117.
—— *jacobinus*, 124, 125.
—— *serratus*, 116, 124, 125.
clamosus, Cuculus, 116, 123, 124.
——, —— *clamosus*, 123.
Coachwhip Bird, Eastern, 83.
Coccycolius iris, 62.
Coccystes albonotatus, 124, 125, 126.
—— *caroli*, 124, 125, 126.
cœlebs, Fringilla, 86.
Columba tympanistria, 105.
columbarius richardsoni, Falco, 80.
Columbigallina passerina pallescens, 81.
—— *passerina passerina*, 80.
communis, Sylvia communis, 70.
comrii, Manucodia (Eucorax), 115.
congo, Cisticola pipiens, 110, 111.
conspicillatus, Pelecanus, 84.
contra jalla, Sturnopastor, 85.
Coot, American, 79.
Coracina novæ-hollandiæ, 83.
Corbie, Indian, 85.
Cormorant, 79.
——, Brandt's, 81.
——, Little Pied, 84.
——, Pied, 84.
coromandus, Bubulcus ibis, 85.
coronatus, Stephanoaëtus, 62.
coronoides levaillanti, Corvus, 85.
Corvus brachyrhynchos brachyrhynchos, 79.
—— *coronoides levaillanti*, 85.
—— *splendens splendens*, 85.
Corythæola cristata cristata, 133.
Corythaixoides leucogaster, 133, 134.
Courser, 103.
Cowbird, 73, 89.
——, Eastern, 80.
——, Shiny, 88.
Crane, 7.
crassirostris, Chettusia, 92–93.
——, *Hemiparra crassirostris*, 35, 92, 93.
—— *hybrida, Hemiparra*, 93.
crateri, Yungipicus obsoletus, 15.
cristata ankaræ, Galerida, 57, 58.
—— *brachyura, Galerida*, 56, 57.
—— *caucasica, Galerida*, 57.
—— *cinnamomina, Galerida*, 57.
——, *Corythæola cristata*, 133.
——, *Cyanocitta cristata*, 80.
—— *ioniæ, Galerida*, 57, 58.
—— *magna, Galerida*, 56, 57.
——, *Musophaga*, 133.
—— *subtaurica, Galerida*, 56, 57.
—— *weigoldi, Galerida*, 56, 57.
—— *zion, Galerida*, 56, 57.
croceus, Macronyx croceus, 62.
Crossbill, 98.
Crow, 54.
——, American, 79.
——, Black, 85.
——, Carrion, 117.
——, Eastern, 79.
——, Grey-necked, 85.
——, Hooded, 54, 117.
——, Indian, 85.
Cryptospiza, 100.
—— *australis*, 101.
—— *ocularis*, 101.
—— *reichenovii*, 101.
—— —— *australis*, 101.

Cryptospiza reichenovii ocularis, 101.
—— —— *sanguinolenta*, 100, 101.
—— *salvadorii*, 101.
—— —— *australis*, 100, 101.
Cuckoo, 29, 30, 32, 53, 54, 116, 117, 123, 124.
——, Great Spotted, 31, 53.
—— Lesser, 131.
Cuckoo-Shrike, 19.
—— ——, Black-faced, 83.
Cuculus canorus, 29.
—— *chalybæus*, 124.
—— *clamosus*, 116, 123, 124.
—— —— *clamosus*, 123.
—— *gabonensis*, 123, 124.
—— *jacksoni*, 123, 124.
—— *mabiræ*, 123, 124.
—— *poliocephalus*, 132.
—— —— *poliocephalus*, 132, 133.
—— —— *rochii*, 131, 132, 133.
—— *solitarius*, 123.
Cuncuma leucogaster, 68.
Curlew, 8, 54, 84.
Currawong, Grey, 83.
——, Pied, 83.
cursor somalensis, *Cursorius*, 72.
Cursorius cursor somalensis, 72.
cyaneus, *Malurus cyaneus*, 83.
Cyanocitta cristata cristata, 80.
cyanoleuca, *Grallina cyanoleuca*, 83.
Cyanomitra verticalis viridisplendens, 11.
cyanophrys, *Merops orientalis*, 9, 10.
cyanopus, *Numenius*, 84.
Cymochorea melania matsudariæ, 134.
—— *owstoni*, 134.

Dacelo novæguineæ novæguineæ, 83.
dactylatra personata, *Sula*, 84.
dambo, *Cisticola dambo*, 110.
—— *kasai*, *Cisticola*, 109, 110.
Daption, 47.
—— *capense*, 82.
decipiens perspicillata, *Streptopelia*, 104, 105.
——, *Streptopelia*, 104, 105.
deckeni, *Turdus olivaceus*, 13.
deglandi, *Melanitta*, 81.
delawarensis, *Larus*, 79, 80.
Demigretta sacra, 84.
deserti hijazensis, *Ammomanes*, 8.
—— *samharensis*, *Ammomanes*, 8.
deserticola, *Sylvia*, 76.
desolata, *Pachyptila*, 82.
Dicrurus macrocercus javanus, 85.
diluta, *Stachyris poliocephala*, 115.
dilutus, *Stachyris nigriceps*, 115.
Diomedea, 47.
—— *exulans*, 48, 49, 50, 82.
—— *nigripes*, 81.
—— (*Thalassarche*) *melanophris*, 82.
Diomedella cauta, 45.
Dioptrornis amani, 19.
—— *fischeri amani*, 19.
Diphyllodes magnificus hunsteini, 66.
distinguenda, *Petrochelidon nigricans*, 91, 92.
Diver, Red-throated, 7.
domesticus, *Passer*, 28.
——, —— *domesticus*, 69, 80, 82.
dougallii gracilis, *Sterna*, 84.
Dove, Eastern Ground, 80.
——, Eastern Mourning, 80.
——, Inca, 81.
——, Mexican Ground, 81.
—— Prion, 82.
——, Western White-winged, 80.
Drepanoplectes jacksoni, 12.
Drepanorhynchus reichenowi, 12.
Drongo, Black, 85.
——, Lesser Racquet-tailed, 85.
Duck, 94.
——, Eider-, 6.
——, Flightless, 19.

Eagle, Golden, 7, 80.
——, Sea-, 84.
——, White-breasted Sea-, 68, 92.
edouardi pallasi, *Guttera*, 35.
Egret, American, 80.
——, Cattle, 85, 86.
——, Great White, 84.
Egretta alba, 84.
egretta, *Casmerodius albus*, 80.
Eider, King, 19.
Elanus cæruleus, 12.
elegans, *Platycercus*, 83.
elgonensis, *Turdus olivaceus*, 13.
Emberiza, 70.
—— *calandra calandra*, 70.
—— **schœniclus mackenziei**, subsp. nov., 54.
—— —— *schœniclus*, 32, 54.
—— *striolata sahari*, 77.
Erannornis albicauda kivuensis, 11.
Erithacus rubecula melophilus, 69.
—— —— *sardus*, 86.
erythrogastra, *Hirundo*, 80.
(*Eucorax*) *comrii*, *Manucodia*, 115.
eurhinus, *Tringa totanus*, 86.
eurycricotus, *Zosterops virens* 14, 15.

Eurystomus afer, 12.
eximius, *Platycercus*, 83.
exulans, *Diomedea*, 48, 49, 50, 82.

Falco biarmicus ? subsp., 86.
—— *columbarius richardsoni*, 80.
—— *mexicanus*, 80.
—— *subbuteo*, 85.
Falcon, Peregrine, 7.
——, Prairie, 80.
Fantail, Black and White, 83.
fasciolatus, *Calamonastes*, 72.
—— *stierlingi*, *Calamonastes*, 72.
fedoa, *Limosa*, 81.
Fieldfare, 6, 7.
fischeri amani, *Dioptrornis*, 19.
Flamingo, 78.
flavirostris, *Ceuthmochares aereus*, 34.
Flycatcher, 6.
——, Blue, 11.
——, Crested, 12.
——, Pied, 97.
Fly-Robin, Buff-sided, 106.
Fregata ariel, 84.
—— *minor mathewsi*, 84.
—— *minor palmerstoni*, 82.
Frigate-Bird, Great, 82, 84.
—— ——, Lesser, 84.
Fringilla cœlebs, 86.
—— *montifringilla*, 77.
Frogmouth, Tawny, 83.
Fulica americana americana, 79.
fulicarius, *Phalaropus*, 19, 86.
Fulmarus, 47.
—— *glacialis glacialis*, 79.
fulvicapilla, *Cisticola*, 113, 114, 115.
——, *Cisticola fulvicapilla*, 114.
—— *muelleri*, *Cisticola*, 112, 113, 114.
fulvopectoralis, *Streptopelia*, 104.
Furnarius rufus, 89.
fuscata oahuensis, *Sterna*, 81.
—— *serrata*, *Sterna*, 84.
fuscus antelius, *Larus*, 33, 34, 50, 51, 52.
—— *argentatus*, *Larus*, 27.
—— *britannicus*, *Larus*, 51, 52.
—— *graellsii*, *Larus*, 27, 28, 29, 79.
—— *intermedius*, *Larus*, 27, 28, 29.
——, *Larus*, 27, 28, 29, 33, 51, 52.
——, —— *fuscus*, 27, 28, 29, 34.
—— *mongolicus*, *Larus*, 51.
—— *ponticus*, *Larus*, 51.
—— *taimyrensis*, *Larus*, 33, 50, 51, 52.

Gabianus pacificus, 84.
gabonensis, *Cuculus*, 123, 124.
galactotes, *Cisticola*, 111.
galbula, *Icterus*, 79.
Galerida cristata ankaræ, 57, 58.
—— —— *brachyura*, 56, 57.
—— —— *caucasica*, 57.
—— —— *cinnamomina*, 57.
—— —— *ioniæ*. 57, 58.
—— —— *magna*, 56, 57.
—— —— *subtaurica*, 56, 57.
—— —— *weigoldi*, 56, 57.
—— —— *zion*, 56, 57.
Gannet, 79.
——, Australian, 82, 84.
gentilis, *Accipiter*, 122.
gigantea, *Musophaga*, 133.
giganteus, *Macronectes*, 82.
glacialis, *Fulmarus glacialis*, 79.
glandarius, *Clamator*, 31, 78.
Godwit, Marbled, 81.
Goldfinch, American, 80.
——, Eastern, 80.
Goose, Blue, 19.
——, Emperor, 19.
——, Grey Lag, 7.
——, Lesser Snow, 19.
——, Red-breasted, 19.
Goshawk, 122.
govinda, *Milvus migrans*, 85.
gracilis, *Sterna dougallii*, 84.
Grackle, Javan, 85.
——, Purple, 79.
Gracula religiosa religiosa, 85.
graculina, *Strepera graculina*, 83.
graellsii, *Larus fuscus*, 27, 28, 29, 79.
Grallina cyanoleuca cyanoleuca, 83.
Grebe, Great Crested, 98.
——, Pied-billed, 80.
Green Head, 79.
Greenfinch, 32.
griseiceps, *Apalis thoracica*, 11, 18.
griseus, *Puffinus*, 45, 79, 82.
grotei, *Bessonornis*, 12, 18.
Grouse, Willow, 99.
Guillemot, 98.
——, Bering's, 88.
Guineafowl, Crested, 35.
Gull, 51.
——, Aden, 86.
——, American Herring-, 79.
——, Black-headed, 6, 79, 86.
——, Common, 6.
—— , Great Black-backed, 79.
——, Greater Black-backed, 6.
——, Herring- 28 33, 52, 53, 79.
——, Laughing, 79.

Gull, Lesser Black-backed, 6, 34, 52, 79.
Gull, Little, 6.
——, Pacific, 84.
——, Ring-billed, 79, 80.
——, Sabine's, 19.
——, Siberian Herring-, 34.
——, Silver, 84.
——, Western, 81.
——, Yellow-legged, 86.
Guttera edouardi pallasi, 35.
gutturalis, Hirundo rustica, 85.
Gymnorhina hypoleuca leuconota, 83.
—— *tibicen tibicen*, 83.
Gyps indicus, 85.

Hæmatopus longirostris, 87.
—— *osculans*, 87.
—— —— *osculans*, 88.
—— *ostralegus longirostris*, 84.
Halcyon pyrrhopygius, 85.
—— *sancta*, 85.
Haliæëtus sanfordi, 92.
haliætus carolinensis, Pandion, 80.
Haliastur indus ambiguus, 85.
—— —— *leucosternus*, 84.
—— —— —— *indus*, 85.
Harrier, 80.
—— Hen-, 7.
——, Marsh-, 98.
——, Montagu's, 7.
hartingi, Rhinoptilus africanus, 72 73.
Hawk, Fish-, 80.
——, Levant Sparrow-, 131.
——, Marsh,- 80.
——, Pigeon-, 80.
——, Western Red-tailed, 81.
Hemiparra crassirostris crassirostris, 35, 92, 93.
—— *crassirostris hybrida*, 93.
hemprichii, Larus, 86.
Hen, Grey, 23.
herodias, Ardea herodias, 81.
Heron, Buff-backed, 78.
——, Great Blue, 81.
——-, Reef, 84.
——, White-necked, 84.
heuglini, Larus, 33, 50, 51.
——, *Larus affinis*, 34.
——, —— *argentatus*, 33.
hijazensis, Ammomanes deserti, 8.
Hirundo erythrogastra, 80.
—— *rustica*, 86.
—— —— *gutturalis*, 85.
hoopesi, Sturnella magna, 80.
Hobby, 7, 85, 94, 98.
hudsonius, Circus, 80.
hunsteini, Diphyllodes magnificus, 66.
hunteri prinioides, Cisticola, 12.
hybrida, Hemiparra crassirostris, 93.
Hydrobates pelagicus, 79.
hyperborea, Chen, 19.
hypoleuca leuconota, Gymnorhina, 83.
hypoleucos, Tringa, 85.
hypopinarus, Clamator, 116, 117.

ibis, Bulbulcus ibis, 86.
—— *coromandus, Bubulcus*, 85.
Icterus galbula, 79.
impennis, Alca, 42.
inca, Scardafella inca, 81.
incana, Tringa, 81.
indicus, Gyps, 85.
indranee maingayi, Strix, 36, 37.
—— *newarense, Strix*, 36, 37.
—— *shanensis, Strix*, 36.
——, *Strix indranee*, 37.
indus ambiguus, Haliastur, 85.
——, *Haliastur indus*, 85.
—— *leucosternus, Haliastur*, 84.
inexpectata, Petroica rodinogaster, 127.
——, *Pterodroma*, 48.
ingens, Yungipicus obsoletus, 15, 16.
inornatus, Catoptrophorus semipalmatus, 81.
——, *Sylvia cantillans*, 76.
intermedius, Larus fuscus, 27, 28, 29.
ioniæ, Galerida cristata, 57, 58.
iris, Coccycolius, 62.

Jackass, Laughing, 83.
jacksoni, Cuculus, 123, 124.
——, *Drepanoplectes*, 12.
——, *Zosterops virens*, 15.
jacobinus, Clamator, 124, 125.
jalla, Sturnopastor contra, 85.
javanus, Dicrurus macrocercus, 85.
Jay 24, 25, 26, 27, 50.
——, Northern Blue, 80.
juana, Pterodroma neglecta, 59.

kasai, Cisticola dambo, 109, 110.
Kestrel, 7, 12.
kidderi okahia, Pterodroma, 37.
——, *Pterodroma kidderi*, 37, 38.
kikuyuensis, Alseonax cinereus, 19.

kikuyuensis, Zosterops virens, 11, 13, 14, 15.
Kingfisher, Red-backed, 85.
——, Sacred, 85.
Kite, 77.
——, Black, 85, 86.
——, Black-shouldered, 12.
——, Brahminy, 84, 85.
——, Fork-tailed, 85.
Kittiwake, 98.
kivuensis, Erannornis albicauda, 11.
kleinschmidti, Anthus spinoletta, 55.
Kookaburra, Laughing, 83.
kuhlii borealis, Puffinus, 79.

Lagopus lagopus lagopus, 99, 100.
—— —— *scoticus*, 100.
—— —— **variegatus,** subsp. nov., 99, 100.
agopus scoticus, Lagopus, 100.
—— *variegatus, Lagopus*, 99, 100.
Lammergeier, 78.
Lanner, 86.
Lapwing, 93.
——, White Nile Long-toed, 35.
Lark, 130.
—— Bunting, 81.
——, Crested, 55, 56.
——, Eastern Calandra, 35.
——, Magpie, 83.
——, Rio Grande Meadow, 80.
——, Shore-, 97.
Larus affinis heuglini, 34.
—— —— *taimyrensis*, 34.
—— *antelius*, 28, 29.
—— *argentatus*, 27, 28, 29, 33, 51, 52.
—— —— *antelius*, 53.
—— —— *argentatus*, 52, 53, 79.
—— —— *atlantis*, 53.
—— —— *cachinnans*, 53.
—— —— *heuglini*, 33.
—— —— *michahellesii*, 53.
—— —— *mongolicus*, 53.
—— —— *ponticus*, 53.
—— —— *smithsonianus*, 79.
—— —— *taimyrensis*, 53.
—— —— *vegæ*, 53.
—— *argenteus*, 27.
—— *atricilla*, 79.
—— *cachinnans*, 33, 86.
—— *delawarensis*, 79, 80.
—— *fuscus*, 27, 28, 29, 33, 51, 52.
—— —— *antelius*, 33, 34, 50, 51, 52.
—— —— *argentatus*, 27.
—— —— *britannicus*, 51, 52.
Larus fuscus fuscus, 27, 28, 29, 34.
—— —— *graellsii*, 27, 28, 29, 79.
—— —— *intermedius*, 27, 28, 29.
—— —— *mongolicus*, 51.
—— —— *ponticus*, 51.
—— —— *taimyrensis*, 33, 50, 51, 52.
—— *hemprichii*, 86.
—— *heuglini*, 33, 50, 51.
—— *leucophthalmus*, 86.
—— *marinus*, 79.
—— *novæ-hollandiæ*, 84.
—— *occidentalis occidentalis*, 81.
—— *ridibundus ridibundus*, 79.
—— *sabini*, 19.
—— *taimyrensis*, 28, 33.
Lenatero, 89, 90.
lessoni, Pterodroma, 48.
leucogaster, Chizarhis, 133.
——, *Corythaixoides*, 133, 134.
——, *Cuncuma*, 68.
——, *Sula*, 86.
leucomelas, Puffinus, 82.
leuconota, Gymnorhina hypoleuca, 83.
leucophrys nuttalli, Zonotrichia, 81.
——, *Rhipidura*, 83.
leucophthalmus, Larus, 86.
leucopyga, Œnanthe, 77.
leucorhoa, Oceanodroma, 79.
leucorhynchus amydrus, Artamus, 85.
leucosternus, Haliastur indus, 84.
levaillanti, Corvus coronoides, 85.
lherminieri, Puffinus assimilis, 79.
Limosa fedoa, 81.
lineata, Alecthelia, 58.
——, *Sarothrura*, 58, 59.
lineatus, Numenius arquata, 103.
Linnet, 32.
Linota, 7.
Littlera phœnicea tasmanica, 127.
lobatus, Phalaropus, 86.
Locustella nævia nævia, 33.
longicaudus, Stercorarius, 79.
longirostris, Hæmatopus, 87.
——, —— *ostralegus*, 84.
Lophorhina superba minor, 67.
Lophortyx californica californica, 81.
Lory, Blue Mountain, 83.
—— Red, 83.
luctuosus, Pardalotus, 106.
——, *Pœcilodryas*, 106.
ludoviciana, Piranga, 81.
lugubris, Motacilla alba, 108.
Lyre Bird, 83.

mabiræ, Cuculus, 123, 124.
macclouniei, Alethe, 100.
——, —— *macclouniei*, 100.
—— *njombe, Alethe*, 100.
mackenziei, Emberiza schœniclus, 54.
macrocercus javanus, Dicrurus, 85.
Macronectes, 47.
—— *giganteus*, 82.
Macronyx croceus croceus, 62.
macroura carolinensis, Zenaidura, 80.
macularia, Tringa, 79, 80.
magna, Galerida cristata, 56, 57.
—— *hoopesi, Sturnella*, 80.
magnificus hunsteini, Diphyllodes, 66.
Magpie, 54.
——, Azure-winged, 78.
——, Black-backed, 83.
—— Lark, 83.
——, White-backed, 83.
maingayi, Strix indranee, 36, 37.
malaccensis, Passer montanus, 85.
Mallard, 79.
Malurus cyaneus cyaneus, 83.
Manucodia (*Eucorax*) *comrii*, 115.
marinus, Larus, 79.
Martin, 6.
——, Australian Tree-, 90.
——, Purple, 80.
——, White-headed Bank-, 12.
mathewsi, Fregata minor, 84.
matsudariæ, Cymochorea melania, 134.
mbuluensis, Zosterops virens, 13, 15.
mearnsi, Melopelia asiatica, 80.
meccanus, Merops orientalis, 9.
mediocris, Cinnyris mediocris, 12.
Megalopterus melanogenys, 81.
(——) *minutus, Anous*, 84.
meinertzhageni, Anthus spinoletta, 55.
melania matsudariæ, Cymochorea, 134.
Melanitta deglandi, 81.
—— *perspicillata*, 81.
Melanocorypha bimaculata, 35, 36.
—— —— *rufescens*, 36.
—— *calandra*, 36.
—— *rufescens*, 36.
melanocorys, Calamospiza, 81.
melanogenys, Megalopterus, 81.
melanogyna, Molothrus bonariensis, 88.
melanoleucus, Microcarbo, 84.
melanope, Motacilla, 99.
melanophris, Diomedea (*Thalassarche*), 82.
Melopelia asiatica mearnsi, 80.
melophilus, Erithacus rubecula, 69.
Menura novæ-hollandiæ, 83.
Merganser, Red-breasted, 6.
Merlin, 7.
——, Richardson's, 80.
Merops, 46.
—— *orientalis biludschicus*, 9.
—— —— *cyanophrys*, 9, 10.
—— —— *meccanus*, 9.
—— —— *muscatensis*, 10.
—— —— **najdanus,** subsp. nov., 9.
—— *ornatus*, 84.
—— *viridis viridis*, 85.
meruensis, Zosterops virens, 14, 15.
merula, Turdus merula, 68.
metopias, Artisornis, 102, 103.
——, —— *metopias*, 102.
—— *bensoni, Artisornis*, 102.
mexicanus, Falco, 80.
michahellesii, Larus argentatus, 53.
Microcarbo melanoleucus, 84.
Micropus apus ? subsp., 86.
migrans ægyptius, Milvus, 86.
—— *govinda, Milvus*, 85.
—— *napieri, Milvus*, 85.
migratorius, Turdus migratorius, 80.
Milvus migrans ægyptius, 86.
—— —— *govinda*, 85.
—— —— *napieri*, 85.
—— *milvus milvus*, 77.
Mimus modulator, 89.
—— *polyglottos polyglottos*, 80.
minor, Lophorhina superba, 67.
—— *mathewsi, Fregata*, 84.
—— *palmerstoni, Fregata*, 82.
——, *Paradisæa*, 64.
minutus, Anous (*Megalopterus*), 84.
Mocking-Bird, Eastern, 80.
modularis occidentalis, Prunella, 32.
modulator, Mimus, 89.
Mollymawk, 47.
Molothrus ater ater, 80.
—— *bonariensis bonariensis*, 88, 89, 90.
—— —— *melanogyna*, 88.
—— *rufoaxillaris*, 90.
Molpastes cafer cafer, 82.
moluccanus, Trichoglossus, 83.
Monarcha alecto nitida, 39.
—— *aruensis aruensis*, 38.
—— *chrysomela*, 38.
—— —— *aruensis*, 38, 39.
—— —— **prærepta,** subsp. nov., 38.
mongolicus, Larus argentatus, 53.
——, —— *fuscus*, 51.
Monticola saxatilis, 77, 86.

montanus malaccensis, Passer, 85.
——, *Passer*, 28.
montifringilla, Fringilla, 77.
Motacilla alba, 86.
—— —— *alba*, 109.
—— —— *lugubris*, 108.
—— *caspica*, 98, 99.
—— *cinerea*, 98.
—— —— *caspica*, 98.
—— *melanope*, 99.
muelleri, Cisticola fulvicapilla, 112, 113, 114.
multicolor, Petroica, 83.
münzneri, Campephaga quiscalina, 19.
muscatensis, Merops orientalis, 10.
Muscicapa chrysoptera, 126.
musicus, Turdus, 77.
Musophaga cristata, 133.
—— *gigantea*, 133.
Mutton-Bird, 130.
Myna, Common Indian, 82.
——, Javan Pied, 85.

nævia, Locustella nævia, 33.
najdanus, Merops orientalis, 9.
napieri, Milvus migrans, 85.
nebouxi, Procelsterna cerulea, 82.
neglecta juana, Pterodroma, 59.
——, *Petrochelidon nigricans*, 92.
——, *Pterodroma neglecta*, 59.
neglectus, Calamonastes simplex, 71.
nesiotis, Xenonetta, 20.
Nesonetta aucklandica, 20.
newarense, Strix indranee, 36, 37.
Nightjar, Black-shouldered, 62.
nigra surinamensis, Chlidonias, 80.
nigricans caleyi, Petrochelidon, 91.
—— *distinguenda, Petrochelidon*, 91, 92.
—— *neglecta, Petrochelidon*, 92.
—— *papua, Petrochelidon*, 91.
——, *Petrochelidon*, 90, 91.
——, —— *nigricans*, 90, 91.
—— *rogersi, Petrochelidon*, 91.
—— *socialis, Petrochelidon*, 91.
—— *timoriensis, Petrochelidon*, 91, 92.
nigriceps, Arizelocichla nigriceps, 11.
—— *dilutus, Stachyris*, 115.
——, *Diomedea*, 81.
—— *rileyi, Stachyris*, 115.
nigriscapularis, Caprimulgus, 62.
nitida, Monarcha alecto, 39.
——, *Pœcilodryas*, 38.
nivalis, Plectrophenax, 69.
njombe, Alethe macclouniei, 100.
Noddy, Blue-Grey, 82.
——, Common, 82, 84.
——, Hawaiian, 81.
——, White-capped, 84.
Notophoyx pacifica, 84.
novæguineæ, Dacelo novæguineæ, 83.
novæ-hollandiæ, Coracina, 83.
——, *Larus*, 84.
——, *Menura*, 83.
Nucifraga caryocatactes caryocatactes, 50.
Numenius arquata arquata, 103.
—— —— *lineatus*, 103.
—— —— *orientalis*, 103.
—— —— *suschkini*, 103.
—— *cyanopus*, 84.
Nutcracker, 50.
Nuthatch, 70.
nuttalli, Zonotrichia leucophrys, 81.
nyikæ, Turdus olivaceus, 13.

oahuensis, Sterna fuscata, 81.
obscurus, Rhinoptilus chalcopterus, 103, 104.
obsoletus crateri, Yungipicus, 15.
—— *ingens, Yungipicus*, 15, 16.
——, *Yungipicus*, 12.
occidentalis californicus, Pelecanus, 81.
——, *Larus occidentalis*, 81.
——, *Prunella modularis*, 32.
oceanicus, Oceanites, 79, 85.
Oceanites oceanicus, 79, 85.
Oceanodroma leucorhoa, 79.
ocularis, Cryptospiza, 101.
——, —— *reichenovii*, 101.
——, *Ploceus*, 12.
oculeus batesi, Canirallus, 34.
——, *Canirallus oculeus*, 34.
Œna capensis, 115, 116.
Œnanthe leucopyga, 77.
—— *schalowi*, 12.
okahia, Pterodroma kidderi, 37.
oldeani, Turdus olivaceus, 13.
olivaceus deckeni, Turdus, 13.
—— *elgonensis, Turdus*, 13.
—— *nyikæ, Turdus*, 13.
—— *oldeani, Turdus*, 13.
——, *Psophodes olivaceus*, 83.
—— *roehli, Turdus*, 13.
—— *uluguru, Turdus*, 13.
orientalis biludschicus, Merops, 9.
—— *cyanophrys, Merops*, 9, 10.
—— *meccanus, Merops*, 9.
—— *muscatensis, Merops*, 10.
—— *najdanus, Merops*, 9.
——, *Numenius arquata*, 103.

Oriole, Baltimore, 79.
——, Golden, 98.
ornatus, Merops, 84.
orostruthus amani, Phyllastrephus, 16.
——, *Phyllastrephus orostruthus*, 16.
oryzivora, Padda, 85.
osculans, Hæmatopus, 87.
——, —— *osculans*, 88.
Osprey, 7.
——, American, 80.
ostralegus longirostris, Hæmatopus, 84.
Owl, Tawny, 6, 29.
owstoni, Cymochorea, 134.
Oyster-catcher, 6, 84, 87, 88, 98.
——, Chinese, 88.

Pachyptila desolata, 82.
pacifica, Notophoyx, 84.
pacificus, Gabianus, 84.
Padda oryzivora, 85.
Pagodroma, 47.
pallasi, Guttera edouardi 35.
pallescens, Columbigallina passerina, 81.
pallidigaster, Anthreptes, 17.
palmerstoni, Fregata minor, 82.
palpebrata, Phœbetria, 82.
Pandion haliætus carolinensis, 80.
Panurus biarmicus biarmicus, 76.
papua, Petrochelidon nigricans, 91.
Paradise-Bird, 60, 63, 68, 115.
—— ——, Blue, 65.
—— ——, King, 65.
—— ——, Lesser Superb, 67.
—— ——, Magnificent, 66.
Paradisea apoda, 64.
—— *minor*, 64.
—— *rudolphi*, 115.
Paradisornis rudolphi, 65.
Pardalotus luctuosus, 106.
parvirostris, Pterodroma, 82.
Passer domesticus, 28.
—— —— *domesticus*, 69, 80, 82.
—— *montanus*, 28.
—— —— *malaccensis*, 85.
passerina, Columbigallina passerina, 80.
—— *pallescens, Columbigallina*, 81.
pelagica, Chætura, 80–81.
pelagicus, Hydrobates, 79.
——, *Phalacrocorax*, 87.
Pelecanus conspicillatus, 84.
—— *occidentalis californicus*, 81.
—— *rufescens*, 62, 86.
Pelican, Australian, 84.
Pelican, Californian Brown, 81.
——, Pink-backed, 86.
penicillata, Petrogale, 83.
penicillatus, Phalacrocorax, 81.
Penthestes atricapillus septentrionalis, 80.
peracensis, Bhringa remifer, 85.
personata, Sula dactylatra, 84.
perspicillata, Melanitta, 81.
——, *Streptopelia decipiens*, 104, 105.
Petrel, 45, 46, 47.
——, Fork-tailed, 134.
——, Fulmar, 79, 98.
——, Gadfly, 37.
——, Giant, 82.
——, Hawaiian, 81.
——, Kermadec, 59.
——, Leach's, 79.
——, Phœnix, 82.
——, Storm, 79.
——, Wilson's Storm, 79, 85.
Petrochelidon nigricans, 90, 91.
—— —— *caleyi*, 91.
—— —— *distinguenda*, 91, 92.
—— —— *neglecta*, 92.
—— —— *nigricans*, 90, 91.
—— —— *papua*, 91.
—— —— *rogersi*, 91.
—— —— *socialis*, 91.
—— —— *timoriensis*, 91, 92.
Petrogale penicillata, 83.
Petroica ? cerviventris, 106.
—— *chrysoptera*, 127.
—— —— *addenda*, 127.
—— *multicolor*, 83.
—— *phœnicea*, 126, 127.
—— —— *albicans*, 127.
—— *rodinogaster*, 126, 127.
—— —— *inexpectata*, 127.
petrosus, Anthus spinoletta, 55.
phæopygia sandwichensis, Pterodroma, 81.
Phaëthon æthereus æthereus, 82.
—— *rubricaudus rothschildi*, 82.
Phalacrocorax carbo carbo, 79.
—— *pelagicus*, 87.
—— *penicillatus*, 81.
—— *varius*, 84.
Phalarope, 20.
——, Grey, 19, 86.
——, Red-necked, 86.
Phalaropus fulicarius, 19, 86.
—— *lobatus*, 86.
Pheasant, 22.
Philacte canagica, 19.
philbyi, Calandrella blanfordi, 130.
Phœbe, Eastern, 80.
phœbe, Sayornis, 80.

Phœbetria palpebrata, 82.
phœnicea albicans, Petroica, 127.
——, *Petroica*, 126, 127.
—— *tasmanica, Littlera*, 127.
phœniceus, Agelaius phœniceus, 79.
Phœnicurus phœnicurus phœnicurus, 86.
phœnicurus, Phœnicurus phœnicurus, 86.
Phyllastrephus orostruthus amani, subsp. nov., 16.
—— —— *orostruthus*, 16.
Phylloscopus trochilus, 114.
Pigeon, Cape, 82.
——, Guinea, 12.
Pigeon-Hawk, 80.
Pintail, American, 81.
pipiens, Cisticola pipiens, 111.
—— *congo, Cisticola*, 110, 111.
Pipit, Red-throated, 7.
——, Rock, 55.
Piranga ludoviciana, 81.
piscatrix rubripes, Sula, 81, 82.
——, *Sula*, 86.
Pitangus bolivianus, 89.
Platycercus elegans, 83.
—— *eximius*, 83.
platyrhynchos, Anas platyrhynchos, 79.
Plectrophenax nivalis, 69.
Ploceus ocularis, 12.
—— *reichenowi*, 12.
Plover, Ringed, 6.
Podargus strigoides, 83.
podiceps, Podilymbus podiceps, 80.
Podilymbus podiceps podiceps, 80.
Pœcilodryas luctuosus, 106.
—— *nitida*, 38.
Pogonocichla stellata, 13.
poliocephala diluta, Stachyris, 115.
poliocephalus, Cuculus, 132.
——, —— *poliocephalus*, 132, 133.
—— *rochii, Cuculus*, 131, 132, 133.
poliocerca, Sterna bergii, 84.
Poliospiza striolata, 12.
polyglottos, Mimus polyglottos, 80.
ponticus, Larus argentatus, 53.
——, *Larus fuscus*, 51.
prærepta, Monarcha chrysomela, 38.
prinioides, Cisticola hunteri, 12.
Priocella, 47.
Prion, 47.
Procellaria, 47.
—— *æquinoctialis*, 48.
Procelsterna cerulea nebouxi, 82.
Progne subis subis, 80.
Prunella modularis occidentalis, 32.
Psalidoprocne albiceps, 12.
Pseudogyps bengalensis, 85.
Psophodes olivaceus olivaceus, 83.
Ptilonorhynchus violaceus violaceus, 83.
Pterodroma, 47.
—— *inexpectata*, 48.
—— *kidderi kidderi*, 37, 38.
—— —— **okahia**, subsp. nov., 37.
—— *lessoni*, 48.
—— **neglecta juana**, subsp. nov., 59.
—— —— *neglecta*, 59.
—— *parvirostris*, 82.
—— *phæopygia sandwichensis*, 81.
Puffinus, 47.
—— *assimilis lherminieri*, 79.
—— *bulleri*, 82.
—— *griseus*, 45, 79, 82.
—— *kuhlii borealis*, 79.
—— *leucomelas*, 82.
—— *puffinus*, 48.
—— —— *puffinus*, 79.
—— —— *yelkouan*, 86.
—— *tenuirostris*, 84.
puffinus, Puffinus, 48.
——, —— *puffinus*, 79.
—— *yelkouan, Puffinus*, 86.
pyrrhopygius, Halcyon, 85.

Quail, Californian, 81.
quiscalina münzneri, Campephaga, 19.
Quiscalus quiscula quiscula, 79.
quiscula, Quiscalus quiscula, 79.

Rainbow Bird, 84.
Raven, 53, 54.
Redpoll, Lesser, 98.
Redshank, 86, 120.
——, British, 5.
Redstart, 6, 86.
Redwing, 7.
Reeve, 7.
regius, Cicinnurus, 65.
reichenovii australis, Cryptospiza, 101.
——, *Cryptospiza*, 101.
—— *ocularis, Cryptospiza*, 101,
—— *sanguinolenta, Cryptospiza*, 100, 101.
reichenowi, Drepanorhynchus, 12.
——, *Ploceus*, 12.
religiosa, Gracula religiosa, 85.
remifer peracensis, Bhringa, 85.
Rhipidura leucophrys, 83.

Rhinoptilus africanus hartingi, 72, 73.
—— *albofasciatus*, 103, 104.
—— *chalcopterus*, 103, 104.
—— —— *obscurus*, 103, 104.
richardsoni, Falco columbarius, 80.
ridibundus, Larus ridibundus, 79.
rileyi, Stachyris nigriceps, 115.
Riparia rupestris, 77.
Robin, 69, 86.
——, Buff-sided Fly-, 106.
——, Bush, 13.
——, Eastern American, 80.
——, Scarlet, 83.
robusta, Tringa totanus, 120, 121.
rochii, Cuculus poliocephalus, 131, 132, 133.
rodinogaster inexpectata, Petroica, 127.
——, *Petroica*, 126, 127.
——, *Saxicola*, 127.
roehli, Turdus olivaceus, 13.
rogersi, Petrochelidon nigricans, 91.
Roller, 12.
——, Broad-billed, 12.
Rosella, Crimson, 83.
——, Eastern, 83.
rothschildi, Phaëthon rubricaudus, 82.
rubecula melophilus, Erithacus, 69.
—— *sardus, Erithacus*, 86.
rubricaudus rothschildi, Phaëthon, 82.
rubripes, Sula piscatrix, 81, 82.
rudolphi, Paradisea, 115.
——, *Paradisornis*, 65.
rufescens, Melanocorypha, 36.
——, *Melanocorypha bimaculata*, 36.
——, *Pelecanus*, 62, 86.
Ruff, 98.
ruficeps, Tephrocorys cinerea, 130.
ruficollis, Branta, 19.
rufoaxillaris, Molothrus, 90.
rufus, Furnarius, 89.
rupestris, Riparia, 77.
rustica gutturalis, Hirundo, 85.
——, *Hirundo*, 86.
Rynchops albicollis, 85, 134.

sabini, Larus, 19.
sacra, Demigretta, 84.
sahari, Emberiza striolata, 77.
salvadorii australis, Cryptospiza, 100, 101.
——, *Cryptospiza*, 101.
samharensis, Ammomanes deserti, 8.
sancta, Halcyon, 85.
Sandpiper, Common, 85.
——, Green, 7.
——, Grey-rumped, 85.
——, Marsh, 85.
——, Red-legged, 5.
——, Spotted, 79, 80.
——, Wood, 7.
sandwichensis, Pterodroma phæopygia, 81.
sanfordi, Haliæëtus, 92.
sanguinolenta, Cryptospiza reichenovii, 100, 101.
sardus, Erithacus rubecula, 86.
Sarothrura lineata, 58, 59.
saxatalis, Aëronautes saxatalis, 81.
——, *Monticola*, 77, 86.
Saxicola rodinogaster, 127.
Sayornis phœbe, 80.
Scardafella inca inca, 81.
schalowi, Œnanthe, 12.
——, *Turacus*, 11.
schœniclus, Emberiza schœniclus, 32, 54.
—— *mackenziei, Emberiza*, 54.
schœnobænus, Acrocephalus, 31.
scirpaceus, Acrocephalus scirpaceus, 29.
Scoter, Surf, 81.
——, Velvet, 6.
——, White-winged, 81.
scoticus, Lagopus lagopus, 100.
semipalmatus inornatus, Catoptrophorus, 81.
septentrionalis, Cathartes aura, 81.
——, *Penthestes atricapillus*, 80.
Serin, Streaky, 12.
serrata, Sterna fuscata, 84.
serrator, Sula, 82, 84.
serratus, Clamator, 116, 124, 125.
Shag, 87, 98.
shanensis, Strix indranee, 36.
Shearwater, Audubon's, 79.
——, Eastern Mediterranean, 86.
——, Great, 97.
——, Grey-backed, 82.
——, Manx, 79, 94, 97.
——, North Atlantic, 79.
——, Short-tailed, 84.
——, Sooty, 79, 82.
——, White-faced, 82.
Sicalis arvensis, 89.
simplex, Aplopelia simplex, 105.
——, *Calamonastes*, 72.
——, —— *simplex*, 71.
—— *neglectus, Calamonastes*, 71.
—— *undosus, Calamonastes*, 71.
Siskin, 76.
Sitta castanea cinnamoventris, 71.

Sitta castanea tonkinensis, subsp. nov., 71.
Skimmer, Indian, 85.
Skua, Long-tailed, 79.
smithsonianus, Larus argentatus, 79.
socialis, Petrochelidon nigricans, 91.
solitarius, Cuculus, 123.
somalensis, Cursorius cursor, 72.
Somateria spectabilis, 19.
Sparrow, 80, 82.
——, Hedge-, 32.
——, House-, 69, 70.
——, Javan, 85.
——, Nuttall's, 81.
——, Tree-, 85.
Sparrow-Hawk, 7.
—— ——, Levant, 131.
spectabilis, Somateria, 19.
sphenurus, Accipiter badius, 131.
spinoletta kleinschmidti, Anthus, 55.
—— *meinertzhageni, Anthus,* 55.
—— *petrosus, Anthus,* 55.
Spinus spinus, 76.
—— *tristis tristis,* 80.
spinus, Spinus, 76.
splendens, Corvus splendens, 85.
Spoonbill, 94, 98.
Stachyris nigriceps dilutus, 115.
—— —— **rileyi,** nom. nov., 115.
—— *poliocephala diluta,* 115.
stagnatalis, Tringa, 85.
Starling, 80.
——, Emerald, 62.
——, Rose-coloured, 85.
stellata, Pogonocichla, 13.
Stephanoaëtus coronatus, 62.
Stercorarius longicaudus, 79.
Sterna bergii poliocerca, 84.
—— *dougallii gracilis,* 84.
—— *fuscata oahuensis,* 81.
—— —— *serrata,* 84.
stierlingi, Calamonastes fasciolatus, 72.
Stint, Temminck's, 7.
stolidus antelius, Anous, 84.
—— *unicolor, Anous,* 82.
Stonechat, 12.
Stork, White, 12.
strausæ, Apalis bamendæ, 102.
Strepera graculina graculina, 83.
—— *versicolor versicolor,* 83.
Streptopelia decipiens, 104, 105.
—— —— *perspicillata,* 104, 105.
—— *fulvopectoralis,* 104.
strigoides, Podargus, 83.
striolata, Poliospiza, 12.
—— *sahari, Emberiza,* 77.
Strix indranee indranee, 37.
—— —— *maingayi,* 36, 37.
—— —— *newarense,* 36, 37.
—— —— **shanensis,** subsp. nov., 36.
Sturnella magna hoopesi, 80.
Sturnopastor contra jalla, 85.
Sturnus vulgaris vulgaris, 80.
subbuteo, Falco, 85.
subis, Progne subis, 80.
? subsp., *Falco biarmicus,* 86.
? subsp., *Micropus apus,* 86.
subtaurica, Galerida cristata, 56, 57.
Sula bassana, 79.
—— *dactylatra personata,* 84.
—— *leucogaster,* 86.
—— *piscatrix,* 86.
—— —— *rubripes,* 81, 82.
—— *serrator,* 82, 84.
Sunbird, Golden, 12.
——, Green-headed, 11.
superba minor, Lophorhina, 67.
surinamensis, Chlidonias nigra, 80.
suschkini, Numenius arquata, 103.
Swallow, 6, 12, 86.
——, Barn, 80.
——, Eastern, 85.
——, Wood, 85.
Swan, Black, 83.
Swift, 6, 86.
——, Chimney, 80.
——, White-throated, 81.
Sylvia cantillans inornatus, 76.
—— *communis communis,* 70.
—— *deserticola,* 76.
Synthliboramphus antiquus, 87.
taimyrensis, Larus, 28, 33.
——, —— *affinis,* 34.
——, —— *argentatus,* 53.
——, —— *fuscus,* 33, 50, 51, 52.
Tanager, Western, 81.
tasmanica, Littlera phœnicea, 127.
Tatler, Wandering, 81.
tenuirostris, Puffinus, 84.
Tephrocorys, 130.
—— *blanfordi,* 130.
—— *cinerea cinerea,* 130.
—— —— *ruficeps,* 130.
Tern, 6.
——, Arctic, 6.
——, Black, 80.
——, Caspian, 78.
——, Common, 6.

Tern, Crested, 84.
——, Roseate, 84.
——, Sooty, 81, 84.
textrix, Cisticola, 114.
(*Thalassarche*) *melanophris, Diomedea*, 82.
Thalassogeron cauta, 45.
Thalassoica, 47.
thoracica, Apalis, 112, 113.
—— *griseiceps, Apalis*, 11, 18.
Thrush, Olive, 11.
——, Rock, 86.
tibicen, Gymnorhina tibicen, 83.
timoriensis, Petrochelidon nigricans, 91, 92.
Tit, Continental Coal, 97.
Titmouse, 6.
tonkinensis, Sitta castanea, 71.
Totanus bewickii, 5.
totanus bewickii, Tringa, 5.
—— *britannica, Tringa*, 5, 120.
—— *eurhinus, Tringa*, 86.
—— *robusta, Tringa*, 120, 121.
——, *Tringa*, 121.
——, —— *totanus*, 86, 120, 121.
Trichoglossus moluccanus, 83.
Tringa bewickii, 5.
—— *brevipes*, 85.
—— *hypoleucos*, 85.
—— *incana*, 81.
—— *macularia*, 79, 80.
—— *stagnatalis*, 85.
—— *totanus*, 121.
—— —— *bewickii*, 5.
—— —— *britannica*, 5, 120.
—— —— *eurhinus*, 86.
—— —— *robusta*, 120, 121.
—— —— *totanus*, 86, 120, 121.
tristis, Acridotheres tristis, 82.
——, *Spinus tristis*, 80.
trochilus, Phylloscopus, 114.
Trochocercus albonotatus, 12.
—— *bivittatus*, 12.
Tropic-Bird, Red-billed, 82.
—— ——, Red-tailed, 82.
Turacus schalowi, 11.
Turdus, 7.
—— *merula merula*, 68.
—— *migratorius migratorius*, 80.
—— *musicus*, 77.
—— *olivaceus deckeni*, 13.
—— —— *elgonensis*, 13.
—— —— *nyikæ*, 13.
—— —— **oldeani,** subsp. nov., 13.
—— —— *roehli*, 13.
—— —— *uluguru*, 13.
Turkey Buzzard, 81.
Turnstone, 6.
Tympanistria tympanistria typanistria, 105.
tympanistria, Columba, 105.
——, *Tympanistria tympanistria*, 105.
tzitzihoa, Anas acuta, 81.

uluguru, Turdus olivaceus, 13.
undosus, Calamonastes simplex, 71.
unicolor, Anous stolidus, 82.
usambaræ, Zosterops virens, 14, 15.

variegatus, Lagopus lagopus, 99, 100.
varius, Phalacrocorax, 84.
vegæ, Larus argentatus, 53.
versicolor, Strepera versicolor, 83.
verticalis viridisplendens, Cyanomitra, 11.
violaceus, Ptilonorhynchus violaceus, 83.
virens eurycricotus, Zosterops, 14, 15.
—— *jacksoni, Zosterops*, 15.
—— *kikuyuensis, Zosterops*, 11, 13, 14, 15.
—— *mbuluensis, Zosterops*, 13, 15.
—— *meruensis, Zosterops*, 14, 15.
—— *usambaræ, Zosterops*, 14, 15.
viridis, Merops viridis, 85.
viridisplendens, Cyanomitra verticalis, 11.
vulgaris, Sturnus vulgaris, 80.
Vulture, 85.
——, Griffon-, 78.

Wader, 20.
Wagtail, 6.
——, Grey, 98.
——, Pied, 106, 108, 109.
——, White, 86.
——, Yellow, 12.
Wallaby, Rock, 83.
Warbler, Barred, 97.
——, Grasshopper-, 33, 97.
——, Icterine, 94, 98.
——, Long-tailed, 11.
——, Reed-, 29, 30, 31, 32, 33, 53, 54, 70, 97.
——, Sedge-, 31.
——, Subalpine, 5.
——, Willow-, 97.
Weaver, Spectacled, 12.

weigoldi, Galerida cristata, 56, 57.
Wheatear, 12.
White-eye, 11.
Whitethroat, 70.
——, Lesser, 97.
Whydah, 12.
Willet, Western, 81.
Woodpecker, 13.
Wren, Blue, 83.
Wren-Warbler, 71, 72.

Xenonetta nesiotis, 20.

yelkouan, Puffinus puffinus, 86.
Yellow-bill, 34.
Yungipicus obsoletus, 12.
Yungipicus obsoletus crateri, subsp. nov., 15.
—— —— *ingens*, 15, 16.

Zenaidura macroura carolinensis, 80.
zion, Galerida cristata, 56, 57.
Zonotrichia leucophrys nuttalli, 81.
Zosterops virens eurycricotus, 14, 15.
—— —— *jacksoni*, 15.
—— —— *kikuyuensis*, 11, 13, 14, 15.
—— —— **mbuluensis**, subsp. nov., 13, 15.
—— —— **meruensis**, subsp. nov., 14, 15.
—— —— *usambaræ*, 14, 15.

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